MHC-991AV/G99AV

SERVICE MANUAL

US Model
Canadian Model
AEP Model
UK Model
MHC-991AV

E Model
Australian Model
PX Model
MHC-G99AV

- MHC-991AV/G99AV are composed of following models.
  As for the service manual, it is issued for each component model, then, please refer to it.

COMPONENTS MODEL NAME FOR MHC-991AV/G99AV

	MHC-991AV/G99AV
COMPACT DISC DECK RECEIVER SYSTEM	HCD-H991AV
FRONT SPEAKER SYSTEM	SS-H991
CENTER SPEAKER SYSTEM	SS-CN991
REAR SPEAKER SYSTEM	SS-SR991

SPECIFICATIONS

General

Power requirements
  US, Canadian models : 120V AC, 60Hz
  AEP, UK, German, Italian models :
    220 – 230V AC, 50/60Hz
  Malaysia model : 220 – 240V AC, 50/60Hz
  Australian model : 240V AC, 50/60Hz
  Thailand model : 220V AC, 50/60Hz
  OTHER models :
    110 – 120V or 220 – 240V AC, 50/60Hz
    Adjustable with the voltage selector
Power consumption
  US model : 275W
  Canadian model : 300VA
  AEP, UK, German, Italian models : 170W
  Other models : 190W

Supplied accessories

AM loop antenna (1)
Remote RM-SE1AV (1)
Sony SUM-3 (NS) batteries (2)
FM lead antenna (1)
Speaker cords (5)
Foot (4)

Design and specifications are subject to change without notice.

COMPACT Hi-Fi STEREO SYSTEM

SONY®

PARTS LIST

NOTE :
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- Abbreviations

CND : Canadian model
G : German model
IT : Italian model
EA : Saudi Arabia model
HK : Hong Kong model
SP : Singapore model
MY : Malaysia model
AUS : Australian model
AR : Argentine model
TH : Thailand model
IA : Indonesian model

	Part No.	Description	Remark
		ACCESSORIES & PACKING MATERIALS	
	1-473-608-11	COMMANDER, STANDARD (RM-SE1AV)	
	1-501-374-11	ANTENNA, LOOP	
	1-501-594-11	ANTENNA (FM) (MALAYSIA PRODUCT) (AEP)	
	1-501-659-11	ANTENNA (FM) (EA, MY, TH)	
	1-501-659-41	ANTENNA (FM) (US, CND, E, AUS, PX, SP, HK, AR, IA)	
	1-501-804-11	ANTENNA (FM) (INDONESIA PRODUCT) (AEP, UK, G, IT)	
	1-769-317-11	CORD, SPEAKER (FRONT SPEAKER 2.5m)	
	1-769-433-11	CORD, SPEAKER (SURROUND 10m)	
	3-810-949-11	MANUAL, INSTRUCTION (ENGLISH) (US, CND)	
	3-810-949-21	MANUAL, INSTRUCTION (FRENCH) (CND)	
	3-810-949-31	MANUAL, INSTRUCTION (ENGLISH) (UK)	
	3-810-949-41	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, PORTUGUESE) (PRINTED IN INDONESIA) (AEP)	
	3-810-949-51	MANUAL, INSTRUCTION (GERMAN) (G)	
	3-810-949-61	MANUAL, INSTRUCTION (GERMAN, DUTCH, ITALIAN) (PRINTED IN INDONESIA) (AEP, IT)	
	3-810-949-71	MANUAL, INSTRUCTION (DANISH, FINNISH, CHINESE) (PRINTED IN INDONESIA) (AEP)	
	3-810-949-81	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, CHINESE) (E, AUS, PX, SP, HK, AR, IA)	
	3-810-949-91	MANUAL, INSTRUCTION (ARABIC) (E, PX)	
	3-810-950-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, PORTUGUESE) (PRINTED IN MALAYSIA) (AEP)	
	3-810-950-21	MANUAL, INSTRUCTION (GERMAN, DUTCH, ITALIAN) (PRINTED IN MALAYSIA) (AEP)	
	3-810-950-31	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, CHINESE) (EA, MY)	
	3-856-776-11	MANUAL, INSTRUCTION (ENGLISH, THAI) (TH)	
	4-972-322-01	FOOT (Y) (SURROUND)	
*	4-980-428-01	CUSHION (FRONT) (HCD) (MALAYSIA PRODUCT)	
*	4-980-429-01	CUSHION (REAR) (HCD) (MALAYSIA PRODUCT)	
*	4-981-327-01	CUSHION (for SS-H991)	
	4-981-643-01	COVER, BATTERY (for RM-SE1AV)	
*	4-982-299-01	CUSHION (UPPER) (SURROUND)	
*	4-982-300-01	CUSHION (LOWER) (SURROUND)	
*	4-982-354-01	INDIVIDUAL CARTON (E, PX, SP, HK, AR, IA)	
*	4-982-355-01	INDIVIDUAL CARTON (AUS)	
*	4-982-360-01	INDIVIDUAL CARTON (US, CND)	
*	4-982-361-01	INDIVIDUAL CARTON (INDONESIA PRODUCT) (AEP, UK, G, IT)	
*	4-982-547-01	CUSHION (FRONT) (HCD) (EXCEPT MALAYSIA PRODUCT)	
*	4-982-548-01	CUSHION (REAR) (HCD) (EXCEPT MALAYSIA PRODUCT)	
*	4-983-480-01	INDIVIDUAL CARTON (MALAYSIA PRODUCT) (AEP)	
*	4-983-481-01	INDIVIDUAL CARTON (EA)	
*	4-983-482-01	INDIVIDUAL CARTON (MY)	
*	4-984-121-01	INDIVIDUAL CARTON (TH)	

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HCD-H991AV

SERVICE MANUAL

US Model
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AEP Model
UK Model
E Model
Australian Model
PX Model

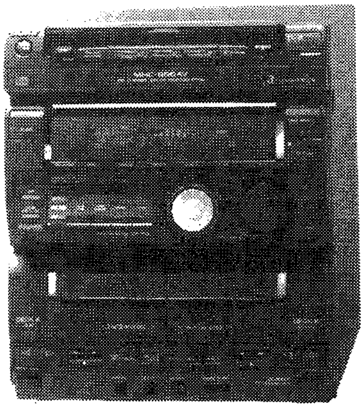

Photo: E model

HCD-H991AV is the tuner, deck, CD and amplifier section in MHC-991AV/G99AV.

CD SECTION	Model Name Using Similar Mechanism	HCD-H771/H771D
	CD Mechanism Type	CDM38-5BD19
	Base Unit Type	BU-5BD19
	Optical Pick-up Type	KSS-213BA/F-NP
TAPE DECK SECTION	Model Name Using Similar Mechanism	HCD-H771/H771D
	Tape Transport Mechanism Type	TCM-220WR2E

SPECIFICATIONS

For the U.S. model
AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:

With 8 ohm loads, both channels driven, from 70 – 20,000 Hz; rated 100 watts per channel minimum RMS power, with no more than 0.9 % total harmonic distortion from 250 milliwatts to rated output (FRONT SPEAKER).

CD player section

System	Compact disc and digital audio system
Laser	Semiconductor laser ($\lambda = 780$ nm) Emission duration: continnous
Laser output	Max. 44.6μ W* * This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block with 7 mm aperture.
Frequency response	2 Hz – 20 kHz (±0.5 dB)
Wavelength	780 – 790 nm
Signal-to-noise ratio	More than 90 dB
Dynamic range	More than 90 dB

CD DIGITAL OUT OPTICAL
(Square optical connector jack, rear panel)

Wavelength	600 nm
Output Level	– 18 dBm

Tuner section

FM stereo, FM/AM superheterodyne tuner

FM tuner section

Tuning range	87.5 – 108.0 MHz
Antenna	FM lead antenna
Antenna terminals	75 ohm unbalanced
Intermediate frequency	10.7 MHz

AM tuner section

Tuning range

US, Canadian models:

AM:	531 – 1,710 kHz (with the tuning interval set at 9 kHz) 530 – 1,710 kHz (with the tuning interval set at 10 kHz)

German, Italian models:

AM:	531 – 1,602 kHz (with the interval set at 9 kHz)

AEP, UK models:

MW:	531 – 1,602 kHz (with the interval set at 9 kHz)
LW:	153 – 279 kHz (with the interval set at 3 kHz)

Australian, Argentine models:

AM:	531 – 1,602 kHz (with the tuning interval set at 9 kHz) 530 – 1,710 kHz (with the tuning interval set at 10 kHz)

— Continue on next page —

COMPACT DISC DECK RECEIVER

SONY®

E2, Thailand models:
- MW: 531 – 1,602 kHz (with the interval set at 9 kHz)
  530 – 1,710 kHz (with the interval set at 10 kHz)

Other models:
- MW: 531 – 1,602 kHz (with the interval set at 9 kHz)
  530 – 1,710 kHz (with the interval set at 10 kHz)
- SW: 5.95 – 17.90 MHz

Antenna: AM loop antenna, External antenna terminals

Intermediate frequency
450 kHz

Amplifier section

US, Canadian models:
- Continuous RMS power output
  - Front speakers: 120W+120W (8 ohms at 1 kHz, 5% THD)
  - Rear speakers: 12W+12W (16 ohms at 1 kHz, 5% THD)
  - Center speakers: 25W (8 ohms at 1 kHz, 5% THD)

AEP, UK, German, Italian models:
- DIN power output
  - Front speakers: 50W+50W (8 ohms at 1 kHz, DIN)
  - Rear speakers: 10W+10W (16 ohms at 1 kHz, DIN)
  - Center speakers: 25W (8 ohms at 1 kHz, DIN)
- Continuous RMS power output
  - Front speakers: 60W+60W (8 ohms at 1 kHz, 10% THD)
  - Rear speakers: 12W+12W (16 ohms at 1 kHz, 10% THD)
  - Center speakers: 30W (8 ohms at 1 kHz, 10% THD)
- Music power output
  - Front speakers: 105W+105W (8 ohms at 1 kHz, 10% THD)
  - Rear speakers: 20W+20W (16 ohms at 1 kHz, 10% THD)
  - Center speakers: 45W (8 ohms at 1 kHz, 10% THD)

Other models:
- Peak music power output
  1,200W
- Continuous RMS power output
  - Front speakers: 80W+80W (8 ohms at 1 kHz, 5% THD)
  - Rear speakers: 10W+10W (16 ohms at 1 kHz, 5% THD)
  - Center speakers: 25W (8 ohms at 1 kHz, 5% THD)

Inputs
- VIDEO/MD IN (phono jacks): voltage 250 mV, impedance 47 kilohms
- MIX MIC (phone jacks): sensitivity 1 mV, impedance 10 kilohms

Outputs
- VIDEO/MD OUT (phono jacks): voltage 250 mV, impedance 1 kilohms
- PHONES (stereo phone jack): accepts headphones of 8 ohms or more.
- FRONT SPEAKER: accepts impedance of 8 to 16 ohms.
- REAR SPEAKER: accepts impedance of 16 ohms.
- CENTER SPEAKER: accepts impedance of 8 to 16 ohms.
- SUPER WOOFER: Voltage 250 mV, impedance 1 kilo ohms.

Tape player section

Recording system
4-track 2-channel stereo

Frequency response
(DOLBY NR OFF)
40 – 13,000 Hz (±3 dB), using Sony TYPE I cassette
40 – 14,000 Hz (±3 dB), using Sony TYPE II cassette

Wow and flutter
±0.15% W. Peak (IEC)
0.1% W. RMS (NAB)
±0.2% W. Peak (DIN)

General

Power requirements
- US, Canadian models: 120V AC, 60 Hz
- AEP, UK, German, Italian models: 220 – 230V AC, 50/60 Hz
- Malaysia model: 220 – 240V AC, 50/60 Hz
- Australian model: 240V AC, 50/60 Hz
- Thailand model: 220V AC, 50/60 Hz
- Other models: 110 – 120V or 220 – 240V AC, 50/60 Hz
  Adjustable with the voltage selector

Power consumption
- US model: 275W
- Canadian model: 300 VA
- AEP, UK, German, Italian models: 170W
- Other models: 190W

Dimensions: Approx. 280 x 325 x 360 mm (11 1/8 x 12 7/8 x 14 1/4 in) (w/h/d) incl. projecting parts and controls

Mass: Approx. 10.4 kg (22 lb 2 oz)

Design and specifications are subject to change without notice.

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
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SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:
Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

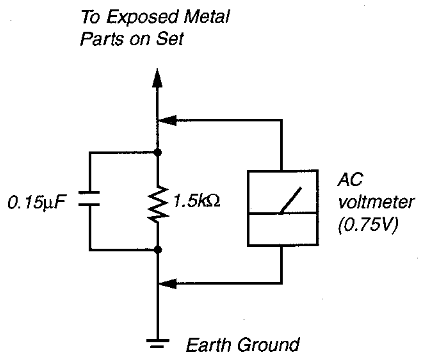

Fig. A. Using an AC voltmeter to check AC leakage.

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of soldering iron around 270°C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.

CLASS 1 LASER PRODUCT
LUOKAN 1 LASERLAITE
KLASS 1 LASERAPPARAT

This appliance is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT MARKING is located on the rear exterior.

CAUTION ; INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM.
ADVARSEL ; USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDS ÆTTELSE FOR STRÅLING.
VARO! ; AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA LASERSÄTEILYLLE.
VARNING ; LASERSTRÅLING NÄR DENNA DEL ÄR OPPNÅD OCH SPÄRREN ÄR URXOPPLAD.
ADVARSEL ; USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES UNNGÅ EKSPONERING FOR STRÅLEN.

This caution label is located inside the unit.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

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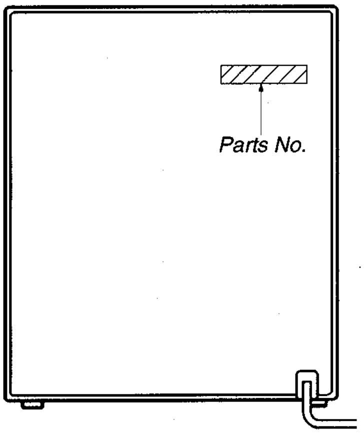
- Abbreviation

CND: Canadian model
G: German model
IT: Italian model
EA: Saudi Arabia model
HK: Hong Kong model
SP: Singapore model
MY: Malaysia model
AUS: Australian model
AR: Argentine model
TH: Thailand model
IA: Indonesian model
E2: Without SW tuner model
E3: With SW tuner model

MODEL IDENTIFICATION
— BACK PANEL —



PARTS No.	MODEL	PRODUCT COUNTRY
4-979-583-4☐	US model	INDONESIA
4-979-583-5☐	Canadian model	INDONESIA
4-979-583-0☐	AEP model	INDONESIA
4-979-583-6☐	AEP model	MALAYSIA
4-979-583-1☐	UK model	INDONESIA
4-979-583-2☐	German model	INDONESIA
4-979-583-3☐	Italian model	INDONESIA
4-979-584-0☐	E2, E3, IA, PX model	INDONESIA
4-979-584-1☐	EA model	MALAYSIA
4-979-584-8☐	Malaysia model	MALAYSIA
4-979-584-5☐	Singapore model	INDONESIA
4-979-584-7☐	Hong Kong model	INDONESIA
4-979-584-6☐	Argentine model	INDONESIA
4-979-584-2☐	Australian model	INDONESIA
4-979-584-9☐	Thailand model	THAILAND

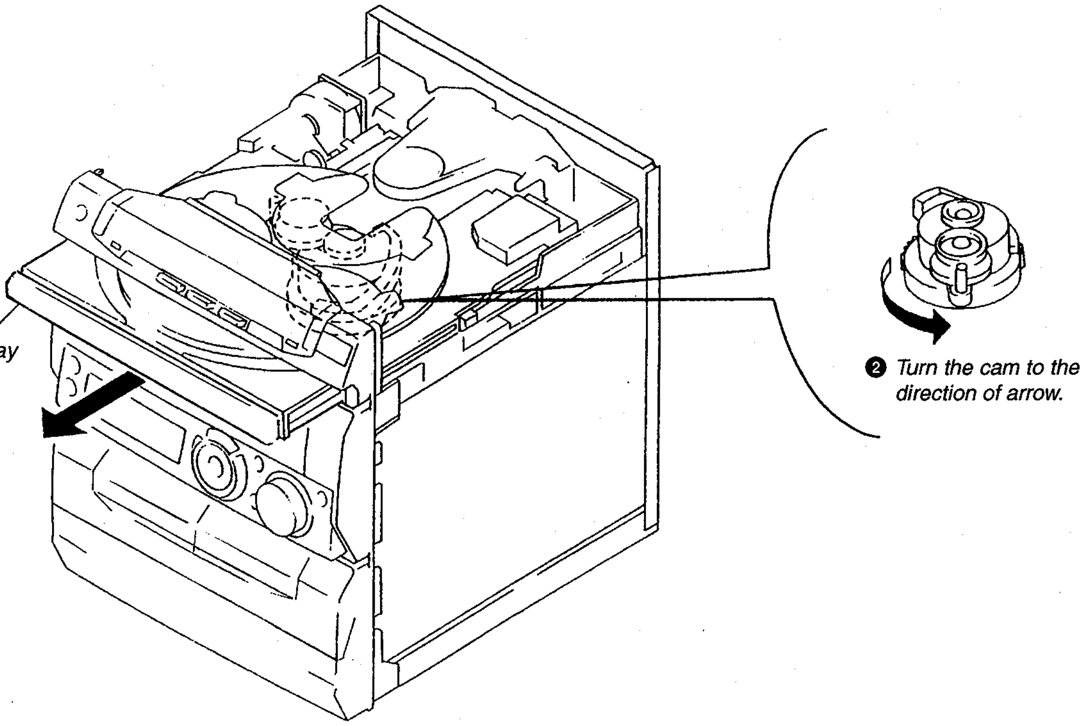
SECTION 1
SERVICING NOTE

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

HOW TO OPEN THE DISC TRAY WHEN POWER SWITCH TURNS OFF

❶ *Remove the Case*



❸ *Pull-out the disc tray*

❷ *Turn the cam to the direction of arrow.*

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

[Switching the channel step 9 KHz/10 KHz]

Press ENTER/NEXT button and POWER button simultaneously to switch the AM channel step 9 KHz and 10 KHz. Be sure not to change with carelessness.

[FL Display Tube, LED All Lit and Key Check mode]

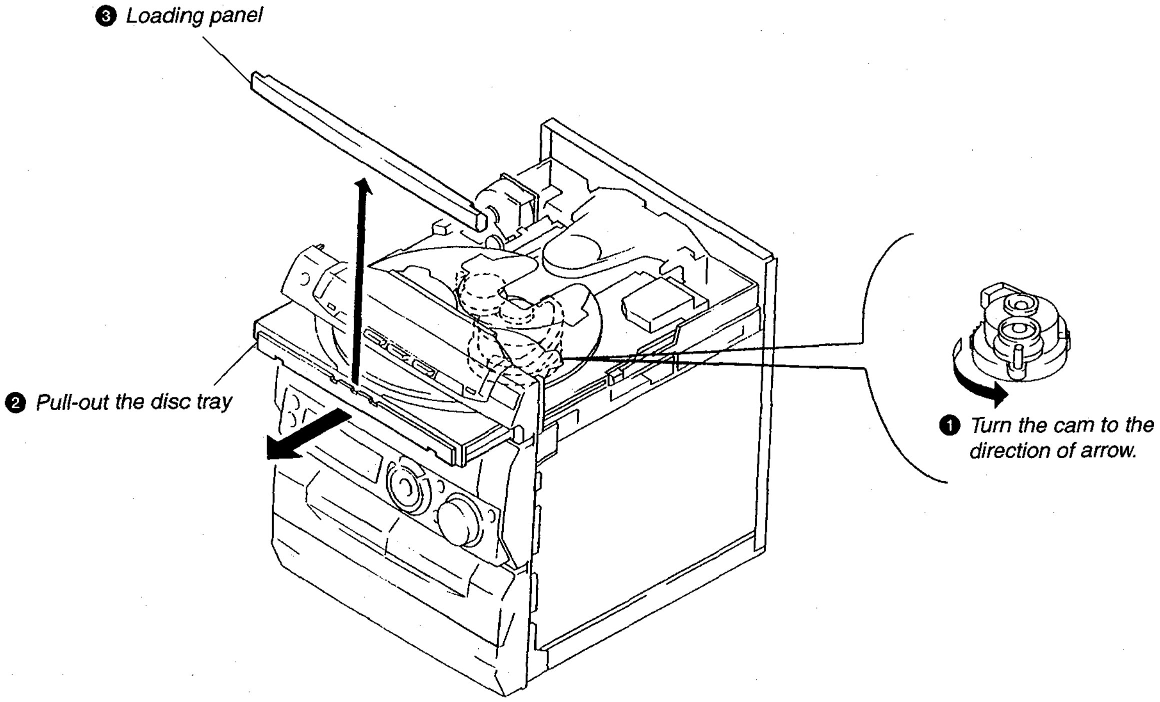
When the TUNER/BAND, DISPLAY/DEMO, and MENU 2 buttons are pressed simultaneously, the FL display tube and LEDs will all light up. Press any button to enter the key check mode.
When the key check mode is entered, the FL display tube displays "K 1 J0 V0". Each time a button is pressed, the counter increases in the following order, K 2 → K 3 → K 4.
If buttons already pressed once are pressed again, the counter will not increase. When the VOLUME knob is rotated in the + direction, the count increases in the following order.
V1 → V2 → V3.
When rotated in the – direction, it decreases in the following order.
V0 → V9 → V8.

When the AMS dial is rotated in the clockwise direction, the count increases in the following order.
J1 → J2 → J3.
When rotated in the counterclockwise direction, it decreases in the following order.
J0 → J9 → J8.
To exit form the test mode, press the TUNER/BAND, DISPLAY/DEMO, MENU 2 buttons simultaneously again.

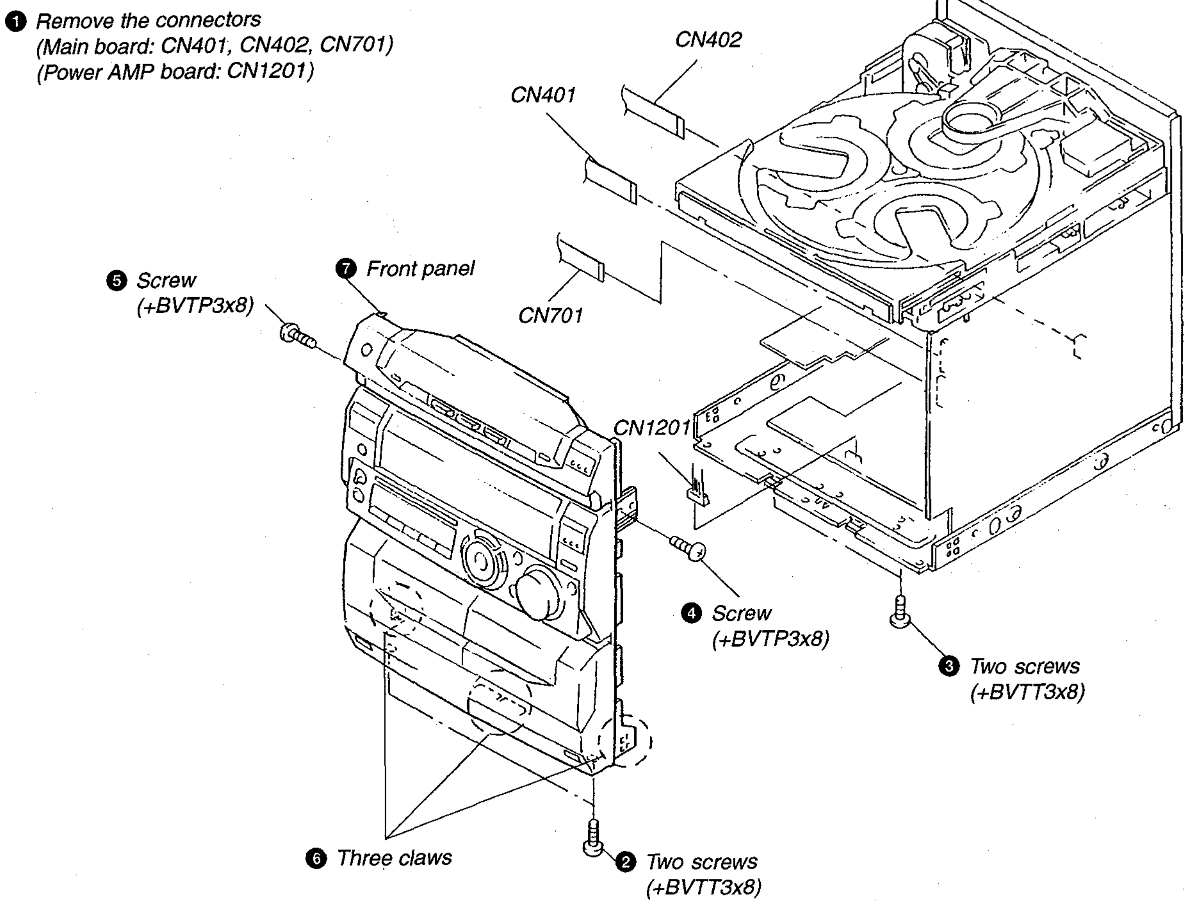
SECTION 3
DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given.

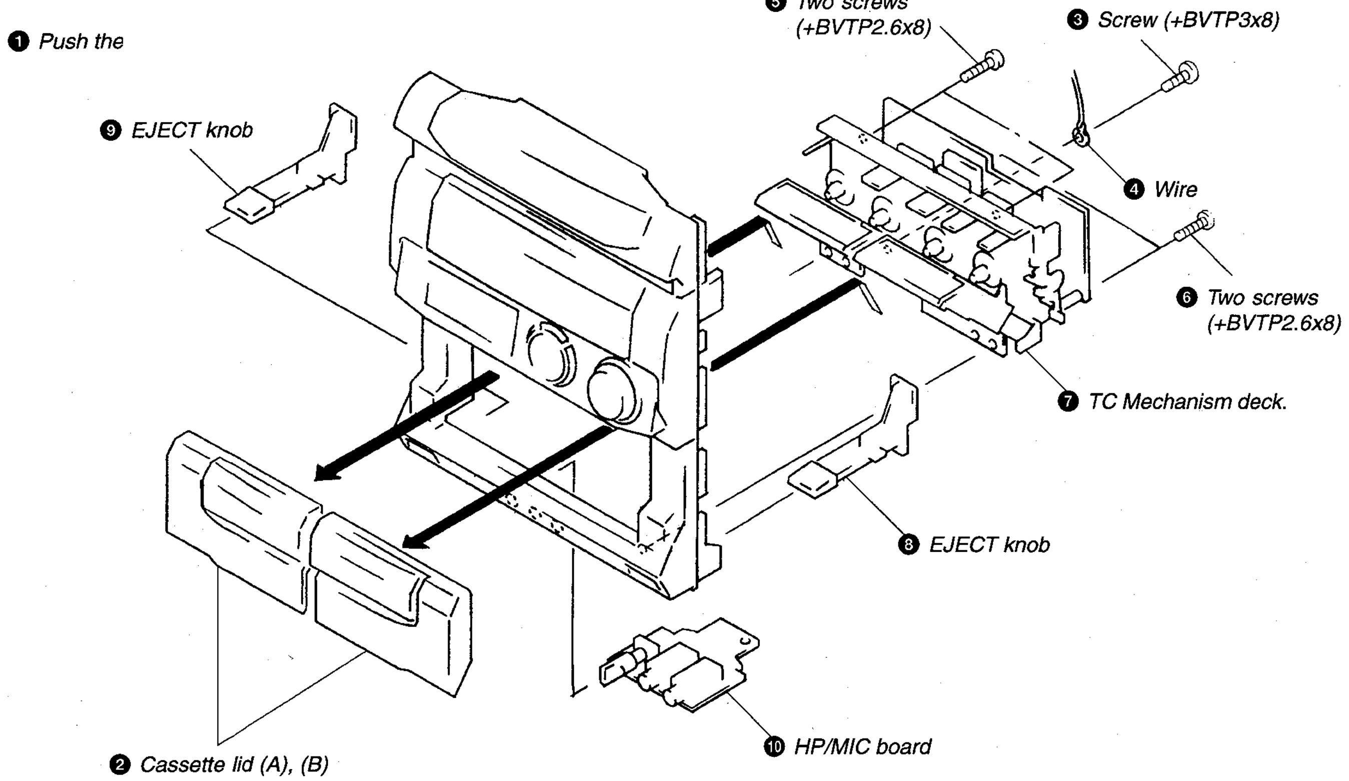
3-1. LOADING PANEL


❸ Loading panel
❷ Pull-out the disc tray
❶ Turn the cam to the direction of arrow.

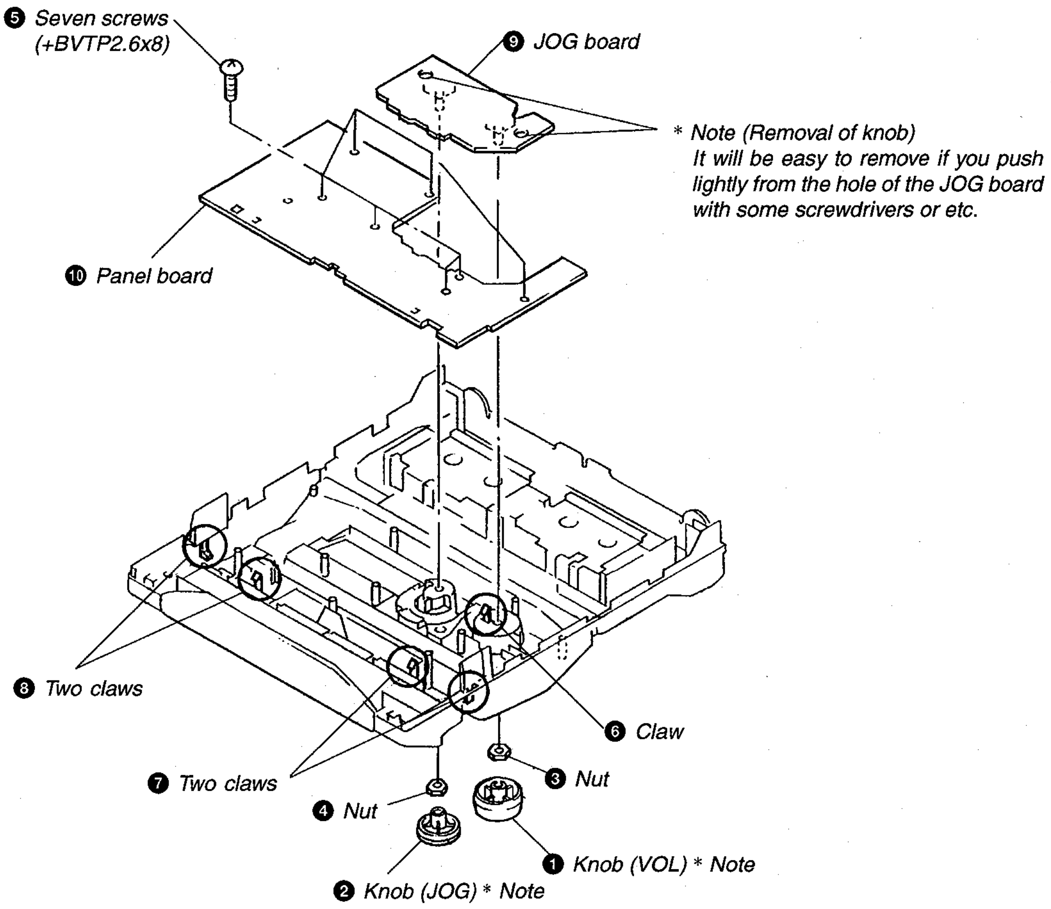
3-2. FRONT PANEL


❶ Remove the connectors
(Main board: CN401, CN402, CN701)
(Power AMP board: CN1201)
CN402
CN401
CN701
CN1201
❺ Screw
(+BVTP3x8)
❼ Front panel
❹ Screw
(+BVTP3x8)
❸ Two screws
(+BVTT3x8)
❻ Three claws
❷ Two screws
(+BVTT3x8)

3-3. TC MECHANISM DECK


❶ Push the
❺ Two screws (+BVTP2.6x8)
❸ Screw (+BVTP3x8)
❾ EJECT knob
❹ Wire
❻ Two screws (+BVTP2.6x8)
❼ TC Mechanism deck.
❽ EJECT knob
❿ HP/MIC board
❷ Cassette lid (A), (B)

3-4. JOG BOARD, PANEL BOARD


❺ Seven screws (+BVTP2.6x8)
❾ JOG board
❿ Panel board
❽ Two claws
❻ Claw
❼ Two claws
❸ Nut
❹ Nut
❶ Knob (VOL) * Note
❷ Knob (JOG) * Note

* Note (Removal of knob)
It will be easy to remove if you push lightly from the hole of the JOG board with some screwdrivers or etc.

TUNER SECTION

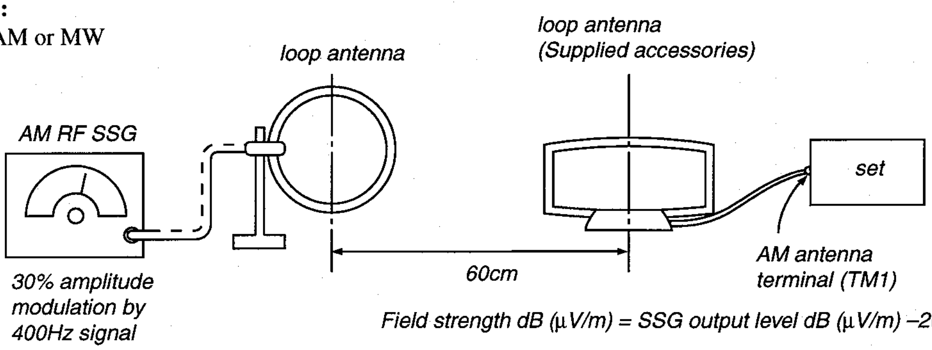
0dB=1µV

Note: As a front-end (FE1) is difficult to repair if faulty, replace it with new one.

AM Tuned Level Adjustment

Note: FM Tuned Level adjustment should be performed after this AM Tuned Level Adjustment.

Setting:
Band: AM or MW


loop antenna
loop antenna
(Supplied accessories)
AM RF SSG
set
60cm
AM antenna
terminal (TM1)
30% amplitude
modulation by
400Hz signal

Field strength dB (µV/m) = SSG output level dB (µV/m) –26dB.

Modulation: 999 kHz (at 9 kHz step)
1,050 kHz (at 10 kHz step)

Procedure:

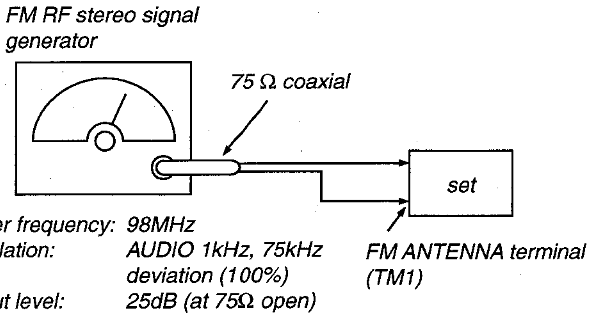
1. Set the output of SSG so that the input level of the set becomes 55 dB.
2. Tune the set to 999 kHz or 1,050 kHz.
3. Adjust RV41 (except US, CND, E2, AR, AUS, TH model), RV42 (US, CND, E2, AR, AUS, TH model) to the point (moment) when the TUNED indicator will change from going off to going on.

Adjustment Location: TCB board

FM Tuned Level Adjustment

Note: This adjustment should be performed after the AM Tuned Level Adjustment.

Setting:
Band: FM


FM RF stereo signal
generator
75 Ω coaxial
set
FM ANTENNA terminal
(TM1)

Carrier frequency: 98MHz
Modulation: AUDIO 1kHz, 75kHz deviation (100%)
Output level: 25dB (at 75Ω open)

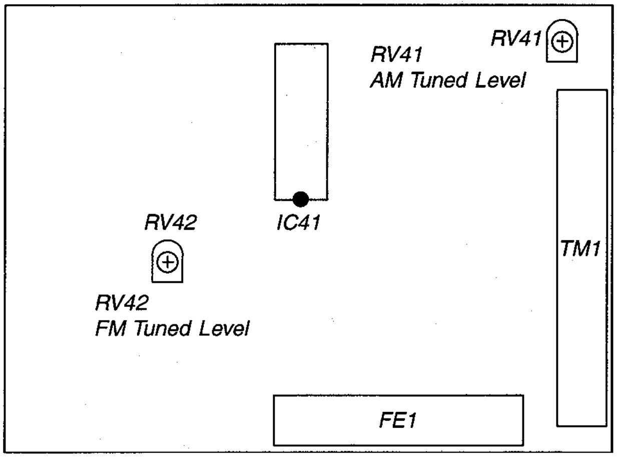
Procedure:

1. Supply a 25 dB 98 MHz signal from the ANTENNA terminal.
2. Tune the set to 98 MHz.
3. Adjust RV42 (except US, CND, E2, AR, AUS, TH model), RV41 (US, CND, E2, AR, AUS, TH model) to the point (moment) when the TUNED indicator will change from going off to going on.

- Abbreviation
  CND: Canadian model.
  AR: Argentine model.
  AUS: Australian model.
  TH: Thailand model.
  E2: Without SW tuner model.

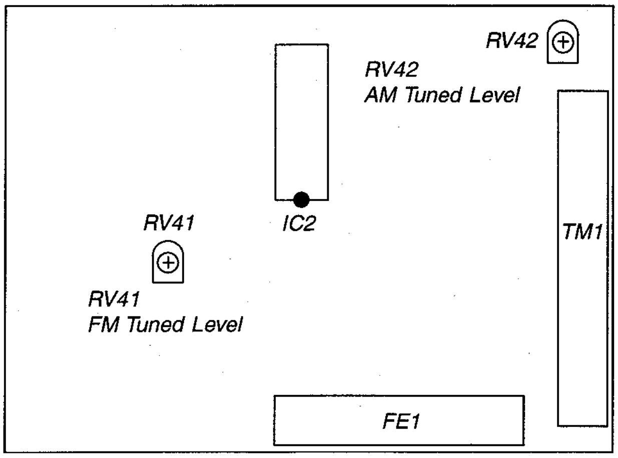
Adjustment Location
except US, CND, E2, AR, AUS, TH model

[TCB BOARD] (Component Side)


RV41
RV41
AM Tuned Level
RV42
IC41
TM1
RV42
FM Tuned Level
FE1

US, CND, E2, AR, AUS, TH model

[TCB BOARD] (Component Side)


RV42
RV42
AM Tuned Level
RV41
IC2
TM1
RV41
FM Tuned Level
FE1

SW OSC Voltage Adjustment (E3, EA, MY, SP, HK, IA, PX model)

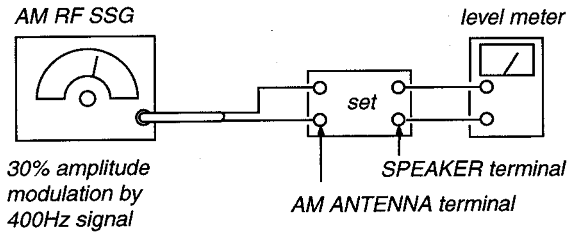
Setting:
Band: SW

Procedure:
1. Connect digital Voltmeter to diode D1 center lead and ground.
2. Adjust for a following value reading on digital voltmeter.

	Set frequency	Adjustment part	Reading on digital voltmeter
SW	5.95 MHz	T2	1.2 ± 0.1 V
	17.9 MHz	CV2	8.5 ± 0.2 V

SW Tracking Adjustment (E3, EA, MY, SP, HK, IA, PX model)

Setting:
Band: SW


AM RF SSG
level meter
set
30% amplitude modulation by 400Hz signal
SPEAKER terminal
AM ANTENNA terminal

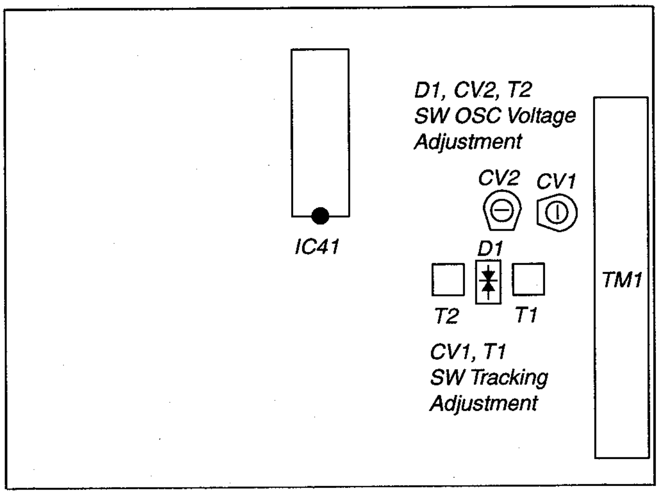
Procedure:
Adjust for maximum reading on level meter.

	Set frequency	Adjustment part
SW	7 MHz	T1
	17 MHz	CV1

- Repeat the procedures is each adjustment several times, and the frequency coverage and tracking adjustment should be finally done by the trimmer capacitors.

Adjustment Location

[TCB BOARD] — Component Side —


D1, CV2, T2
SW OSC Voltage Adjustment
CV2
CV1
IC41
D1
TM1
T2
T1
CV1, T1
SW Tracking Adjustment

- Abbreviation

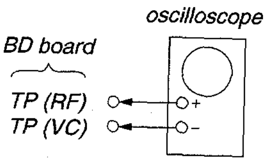
EA: Saudi Arabia model.
MY: Malaysia model.
SP: Singapore model.
HK: Hong Kong model.
IA: Indonesian model.
E3: With SW tuner model.

CD SECTION

Note:

1. CD Block is basically designed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use an oscilloscope with more than 10MΩ impedance.
4. Clean the object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.
5. Adjust the focus bias adjustment when optical block is replaced.

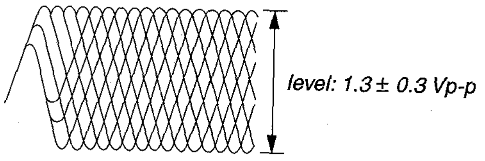
Focus Bias Adjustment



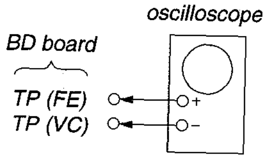
Procedure:

1. Connect oscilloscope to test point TP (RF). (Ground terminal : TP (VC))
2. Turned Power switch on.
3. Put disc (YEDS-18) in and playback.
4. Adjust RV101 so that the waveform is clear.
   (Clear RF signal waveform means that the shape "◊" can be clearly distinguished at the center of the waveform.)
5. After adjustment, check the RF signal level.

- RF signal
  VOLT/DIV: 200 mV
  TIME/DIV: 500 nS



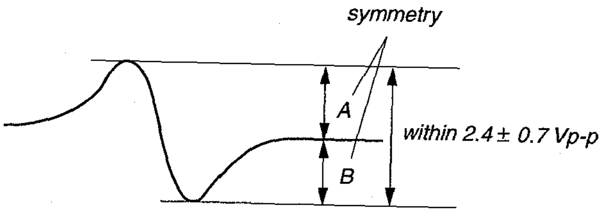
S Curve Check



Procedure :

1. Connect oscilloscope to test point TP (FEO).
2. Connect between test point TP (FOK) and Ground by lead wire.
3. Turn Power switch on.
4. Put disc (YEDS-18) in and turned Power switch on again and actuate the focus search. (actuate the focus search when disc table is moving in and out.)
5. Check the oscilloscope waveform (S-curve) is symmetrical between A and B. And confirm peak to peak level within 2.4 ± 0.7 Vp-p.

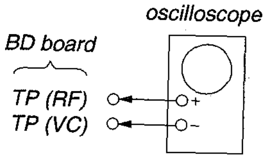
S-curve waveform



6. After check, remove the lead wire connected in step 2.

Note: • Try to measure several times to make sure than the ratio of A : B or B : A is more than 10 : 7.
- Take sweep time as long as possible and light up the brightness to obtain best waveform.

RF Level Check

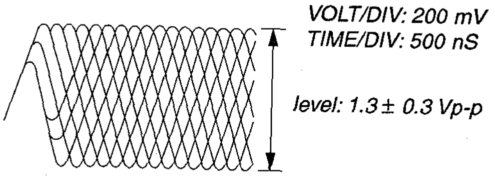


Procedure :

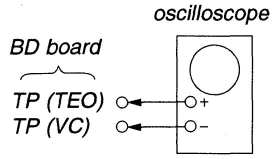
1. Connect oscilloscope to test point TP (RF) on BD board.
2. Turned Power switch on.
3. Put disc (YEDS-18) in and playback.
4. Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.

Note: Clear RF signal waveform means that the shape "◊" can be clearly distinguished at the center of the waveform.

RF signal waveform

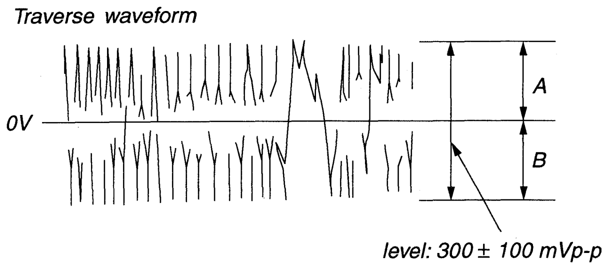


E-F Balance Check


oscilloscope
BD board
TP (TEO)
TP (VC)
+
-

Procedure:

1. Connect test point TP701 (ADJ) on Main board to Ground with a lead wire.
2. Connect oscilloscpe to test point TP (TEO).
3. Turned Power switch on.
4. Put disc (YEDS-18) in and playback.
5. Confirm that the oscilloscope waveform is symmetrical on the top and bottom in relation to 0Vdc, and check this level.


Traverse waveform
0V
A
B
level: 300 ± 100 mVp-p

Specified level: • $\frac{A - B}{2\,(A + B)} \times 100$ = less than ± 7%

• A + B = 300 ± 100 mVp-p

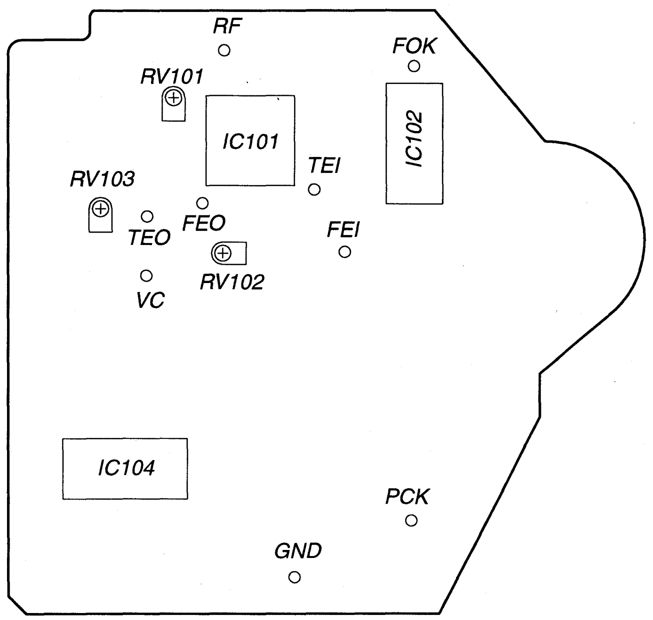
6. Remove the lead wire connected in step 1.

Focus/Tracking Gain Adjustment (RV102, RV103)

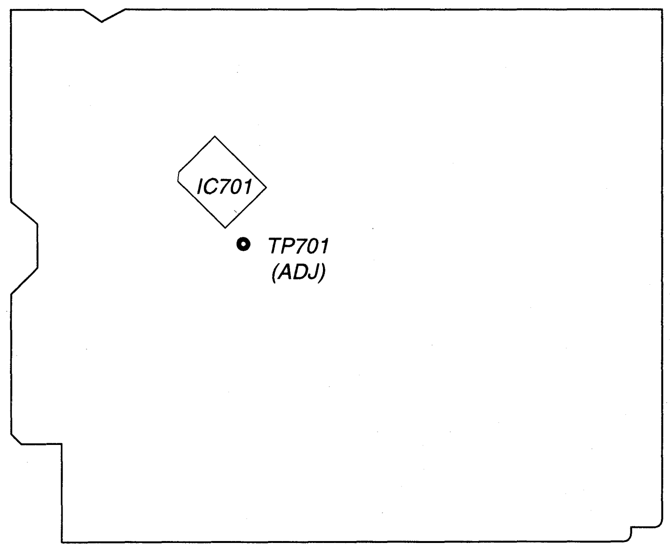
This gain has a margin, so even if it is slightly off.
There is no problem.
Therfore, do not perform this adjustment.
Please note that it should be fixed to mechanical center position when you moved and do not know original position.

Adjustment Location:

[BD BOARD] — Component Side —

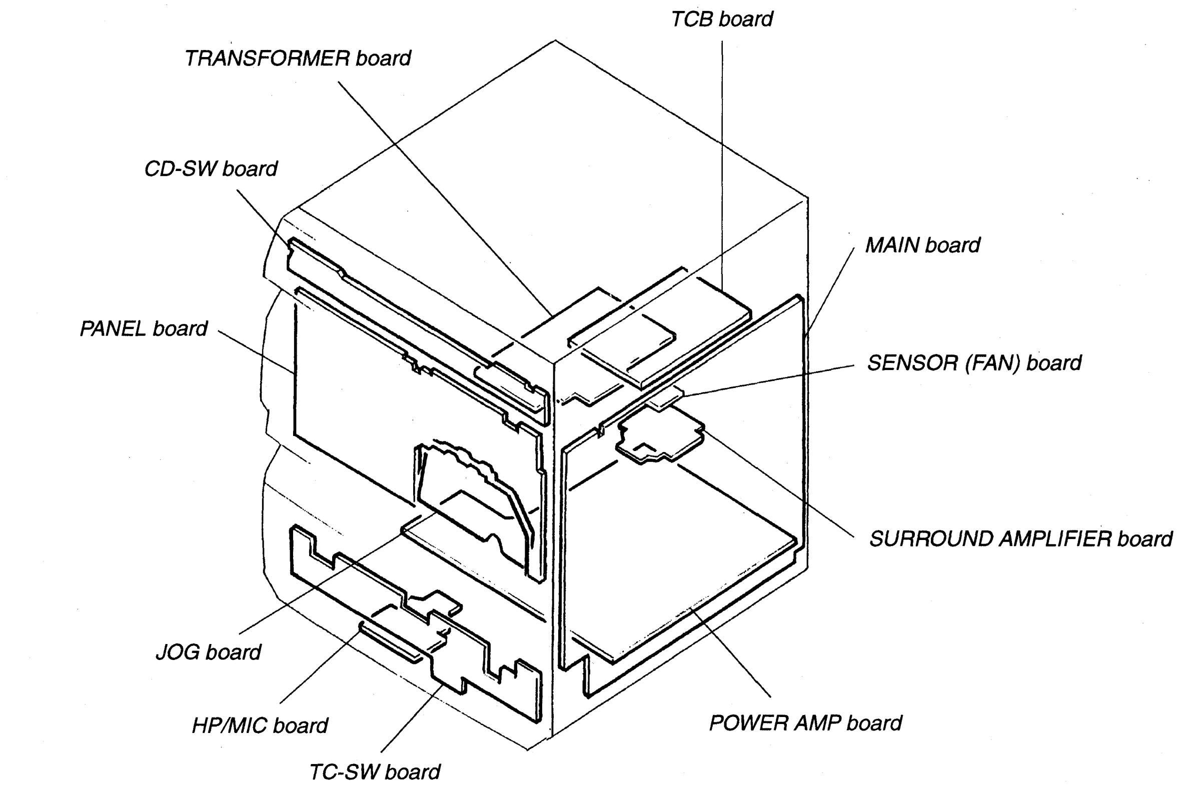

RF
FOK
RV101
IC101
IC102
TEI
RV103
FEO
TEO
FEI
RV102
VC
IC104
PCK
GND

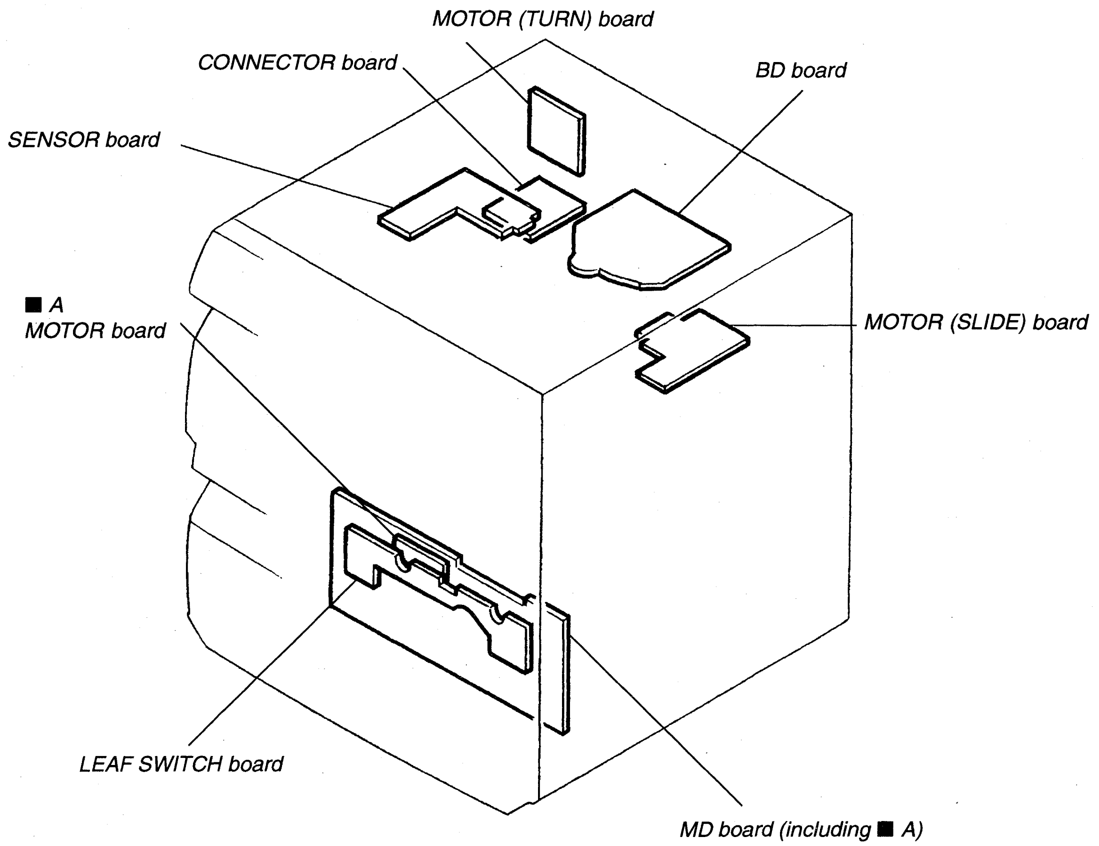
[MAIN BOARD] — Conductor Side —


IC701
TP701
(ADJ)

SECTION 6
DIAGRAMS

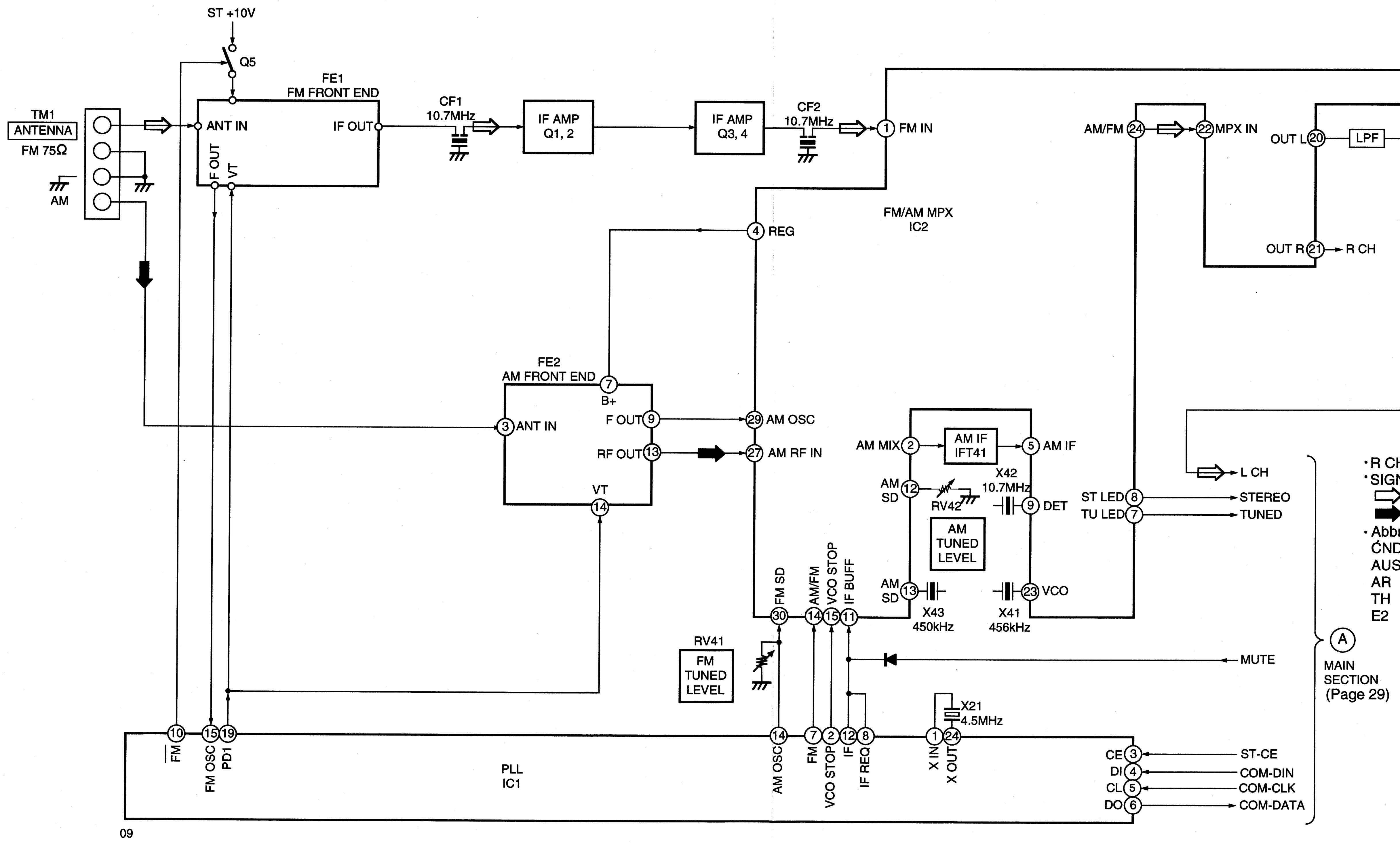
6-1. CIRCUIT BOARDS LOCATION


TCB board
TRANSFORMER board
CD-SW board
MAIN board
PANEL board
SENSOR (FAN) board
SURROUND AMPLIFIER board
JOG board
HP/MIC board
POWER AMP board
TC-SW board


MOTOR (TURN) board
CONNECTOR board
BD board
SENSOR board
■ A
MOTOR board
MOTOR (SLIDE) board
LEAF SWITCH board
MD board (including ■ A)

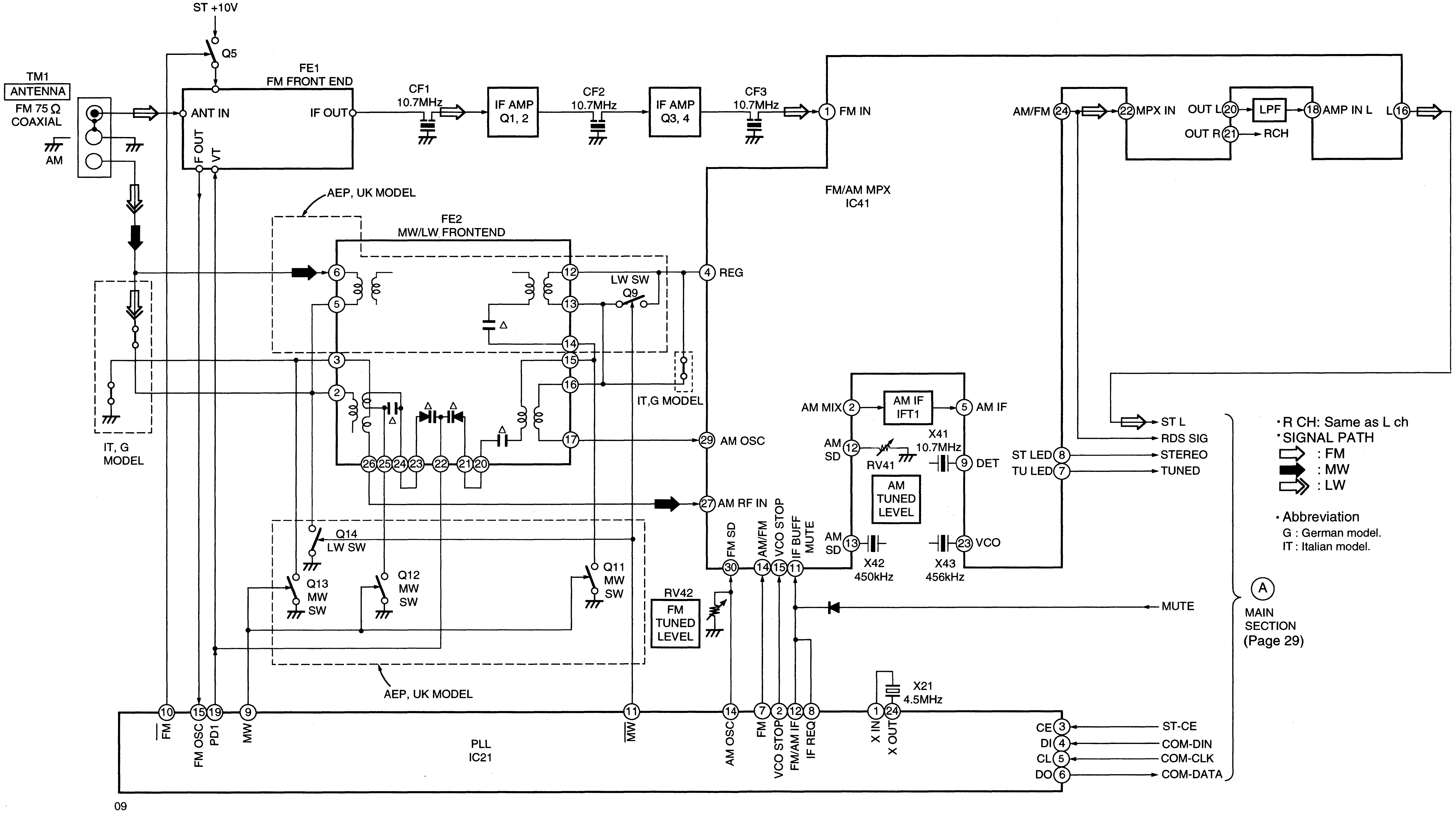
Note:* ■ *A is including in MD board.

6-2. BLOCK DIAGRAMS
— TUNER SECTION — (US, CND, E2, AR, AUS, TH MODEL)


ST +10V
Q5
FE1
FM FRONT END
TM1
ANTENNA
FM 75Ω
AM
ANT IN
IF OUT
F OUT
VT
CF1
10.7MHz
IF AMP
Q1, 2
IF AMP
Q3, 4
CF2
10.7MHz
1 FM IN
4 REG
FM/AM MPX
IC2
AM/FM 24
22 MPX IN
OUT L 20
LPF
18 AMP IN L
L 16
OUT R 21
R CH
FE2
AM FRONT END
7
B+
3 ANT IN
F OUT 9
RF OUT 13
VT
14
29 AM OSC
27 AM RF IN
AM MIX 2
AM IF
IFT41
5 AM IF
X42
10.7MHz
AM SD 12
RV42
9 DET
AM TUNED LEVEL
AM SD 13
23 VCO
X43
450kHz
X41
456kHz
FM SD
AM/FM
VCO STOP
IF BUFF
30
14
15
11
ST LED 8
TU LED 7
L CH
STEREO
TUNED
MUTE
RV41
FM TUNED LEVEL
X21
4.5MHz
10
15
19
FM
FM OSC
PD1
PLL
IC1
14
AM OSC
7
FM
2
VCO STOP
12
IF
8
IF REQ
1
X IN
24
X OUT
CE 3
DI 4
CL 5
DO 6
ST-CE
COM-DIN
COM-CLK
COM-DATA
Ⓐ
MAIN SECTION
(Page 29)
09

- R CH: Same as L ch
- SIGNAL PATH
  ⇨ : FM
  ➡ : AM
- Abbreviation
  CND : Canadian model.
  AUS : Australian model.
  AR : Argentine model.
  TH : Thailand model.
  E2 : Without SW tuner model.

— TUNER SECTION — (AEP, UK, G, IT MODEL)


ST +10V
Q5
TM1
ANTENNA
FM 75 Ω
COAXIAL
AM
FE1
FM FRONT END
ANT IN
IF OUT
IF OUT
VT
CF1
10.7MHz
IF AMP
Q1, 2
CF2
10.7MHz
IF AMP
Q3, 4
CF3
10.7MHz
1 FM IN
FM/AM MPX
IC41
AM/FM 24
22 MPX IN
OUT L 20
LPF
18 AMP IN L
L 16
OUT R 21
RCH
AEP, UK MODEL
FE2
MW/LW FRONTEND
6
5
12
13
14
15
16
17
3
2
LW SW
Q9
4 REG
IT,G MODEL
IT, G
MODEL
26 25 24 23 22 21 20
29 AM OSC
27 AM RF IN
AM MIX 2
AM IF
IFT1
5 AM IF
AM SD 12
X41
10.7MHz
RV41
9 DET
AM
TUNED
LEVEL
AM SD 13
X42
450kHz
X43
456kHz
23 VCO
FM SD
AM/FM
VCO STOP
IF BUFF
MUTE
30 14 15 11
Q14
LW SW
Q13
MW
SW
Q12
MW
SW
Q11
MW
SW
RV42
FM
TUNED
LEVEL
AEP, UK MODEL
ST L
RDS SIG
ST LED 8
STEREO
TU LED 7
TUNED
MUTE
X21
4.5MHz
PLL
IC21
10 FM
15 FM OSC
19 PD1
9 MW
11 MW
14 AM OSC
7 FM
2 VCO STOP
12 FM/AM IF
8 IF REQ
1 X IN
24 X OUT
CE 3
DI 4
CL 5
DO 6
ST-CE
COM-DIN
COM-CLK
COM-DATA
Ⓐ
MAIN
SECTION
(Page 29)
09

- R CH: Same as L ch
- SIGNAL PATH

⇨ : FM

➡ : MW

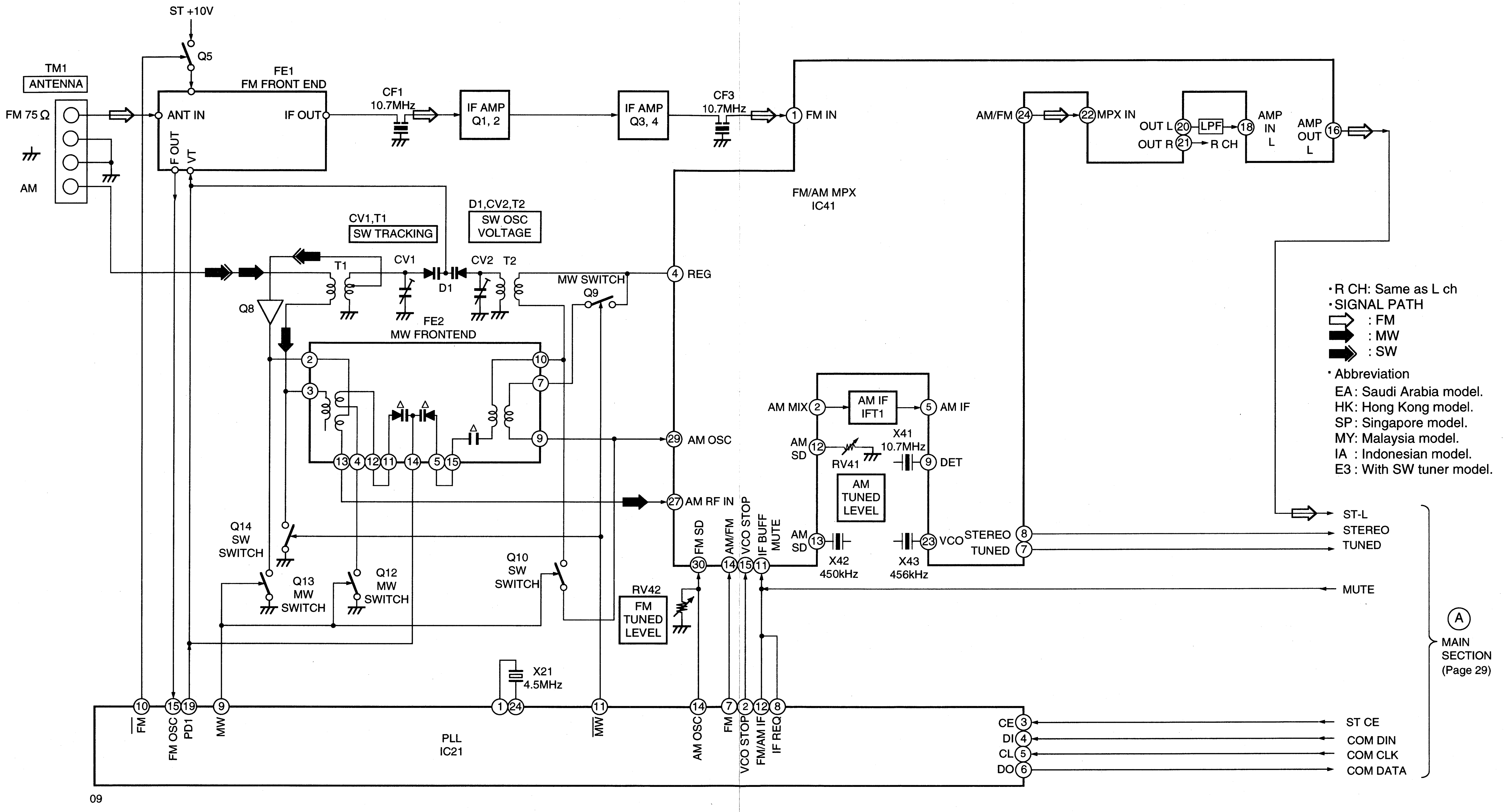
⇛ : LW

- Abbreviation

G : German model.

IT : Italian model.

— TUNER SECTION — (E3, EA, HK, SP, MY, IA, PX MODEL)


ST +10V
Q5
TM1
ANTENNA
FM 75 Ω
AM
FE1
FM FRONT END
ANT IN
IF OUT
F OUT
VT
CF1
10.7MHz
IF AMP
Q1, 2
IF AMP
Q3, 4
CF3
10.7MHz
FM IN
CV1,T1
SW TRACKING
D1,CV2,T2
SW OSC
VOLTAGE
T1
CV1
D1
CV2
T2
Q8
FE2
MW FRONTEND
MW SWITCH
Q9
REG
AM OSC
AM RF IN
Q14
SW
SWITCH
Q13
MW
SWITCH
Q12
MW
SWITCH
Q10
SW
SWITCH
RV42
FM
TUNED
LEVEL
X21
4.5MHz
FM SD
AM/FM
VCO STOP
IF BUFF
MUTE
FM/AM MPX
IC41
AM MIX
AM IF
IFT1
AM IF
AM
SD
RV41
X41
10.7MHz
DET
AM
TUNED
LEVEL
AM
SD
X42
450kHz
X43
456kHz
VCO
STEREO
TUNED
AM/FM
MPX IN
OUT L
OUT R
LPF
R CH
AMP
IN
L
AMP
OUT
L
ST-L
STEREO
TUNED
MUTE
A
MAIN
SECTION
(Page 29)
PLL
IC21
FM
FM OSC
PD1
MW
MW
AM OSC
FM
VCO STOP
FM/AM IF
IF REQ
CE
DI
CL
DO
ST CE
COM DIN
COM CLK
COM DATA
09

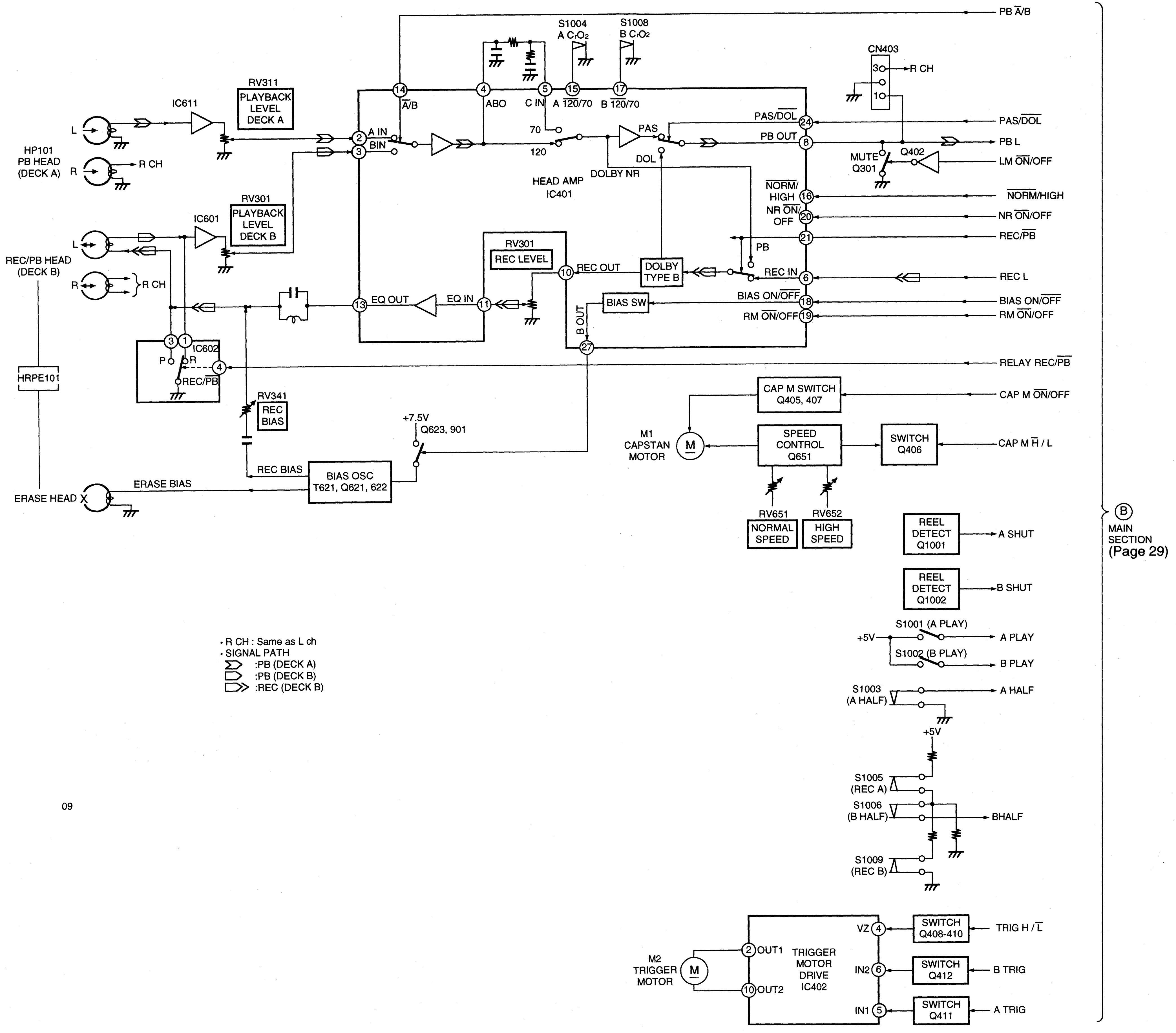
- R CH: Same as L ch
- SIGNAL PATH

⇨ : FM
➡ : MW
➡ : SW

- Abbreviation

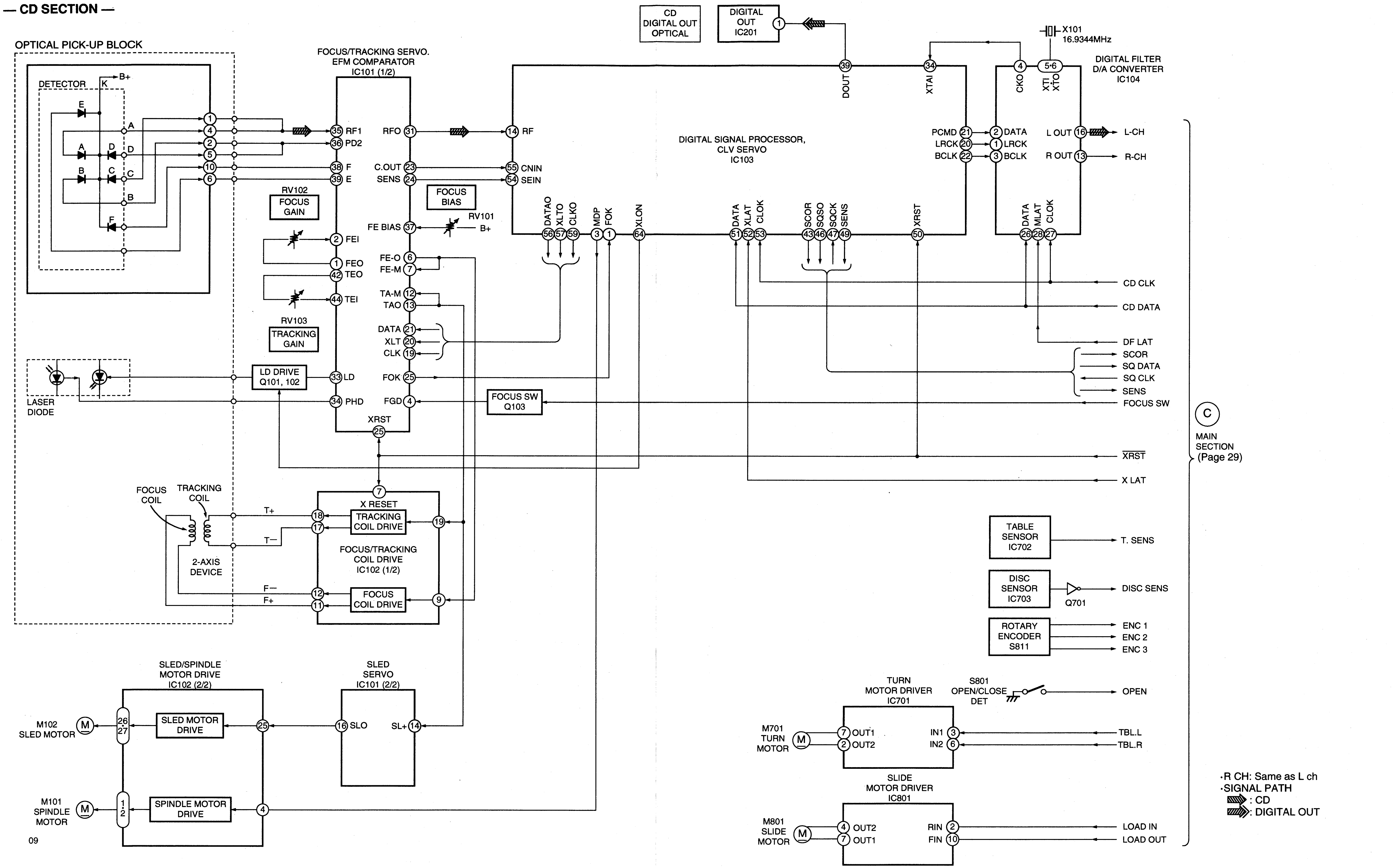
EA : Saudi Arabia model.
HK : Hong Kong model.
SP : Singapore model.
MY: Malaysia model.
IA : Indonesian model.
E3 : With SW tuner model.

— DECK SECTION —


PB A/B
S1004
A CrO2
S1008
B CrO2
CN403
R CH
RV311
PLAYBACK LEVEL DECK A
IC611
HP101
PB HEAD
(DECK A)
A/B
ABO
C IN
A 120/70
B 120/70
A IN
BIN
70
120
PAS
PAS/DOL
PB OUT
PB L
DOL
DOLBY NR
HEAD AMP
IC401
MUTE
Q301
Q402
LM ON/OFF
NORM/HIGH
NR ON/OFF
REC/PB
RV301
PLAYBACK LEVEL DECK B
IC601
REC/PB HEAD
(DECK B)
RV301
REC LEVEL
REC OUT
DOLBY TYPE B
PB
REC IN
REC L
EQ OUT
EQ IN
BIAS SW
BIAS ON/OFF
RM ON/OFF
B OUT
IC602
P
R
REC/PB
RELAY REC/PB
HRPE101
RV341
REC BIAS
+7.5V
Q623, 901
CAP M SWITCH
Q405, 407
CAP M ON/OFF
M1
CAPSTAN MOTOR
SPEED CONTROL
Q651
SWITCH
Q406
CAP M H/L
REC BIAS
BIAS OSC
T621, Q621, 622
ERASE BIAS
ERASE HEAD
RV651
NORMAL SPEED
RV652
HIGH SPEED
REEL DETECT
Q1001
A SHUT
REEL DETECT
Q1002
B SHUT
B
MAIN SECTION
(Page 29)
• R CH : Same as L ch
• SIGNAL PATH
:PB (DECK A)
:PB (DECK B)
:REC (DECK B)
S1001 (A PLAY)
+5V
A PLAY
S1002 (B PLAY)
B PLAY
S1003
(A HALF)
A HALF
+5V
S1005
(REC A)
S1006
(B HALF)
BHALF
S1009
(REC B)
M2
TRIGGER MOTOR
OUT1
OUT2
TRIGGER MOTOR DRIVE
IC402
VZ
IN2
IN1
SWITCH
Q408-410
TRIG H/L
SWITCH
Q412
B TRIG
SWITCH
Q411
A TRIG

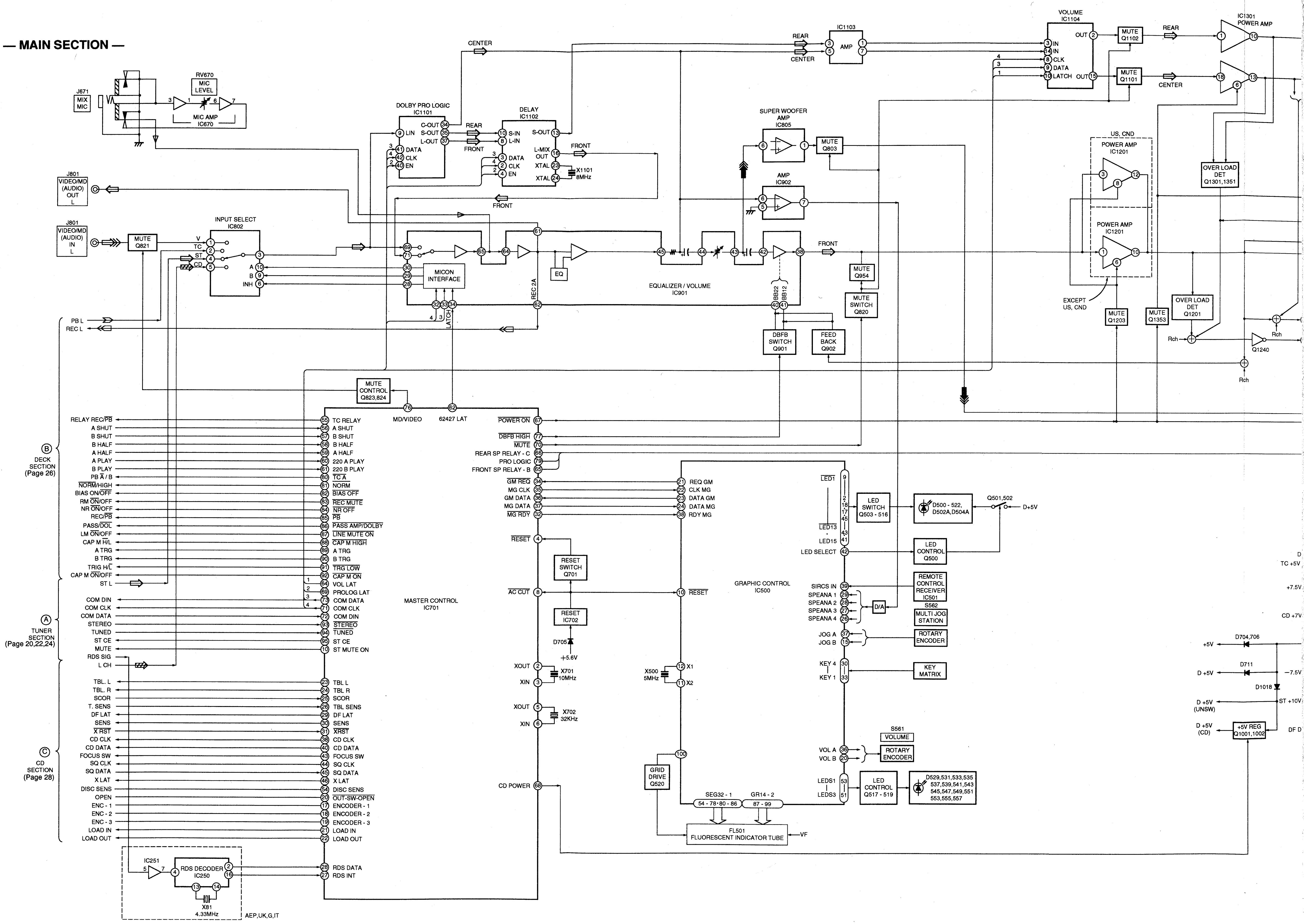
09

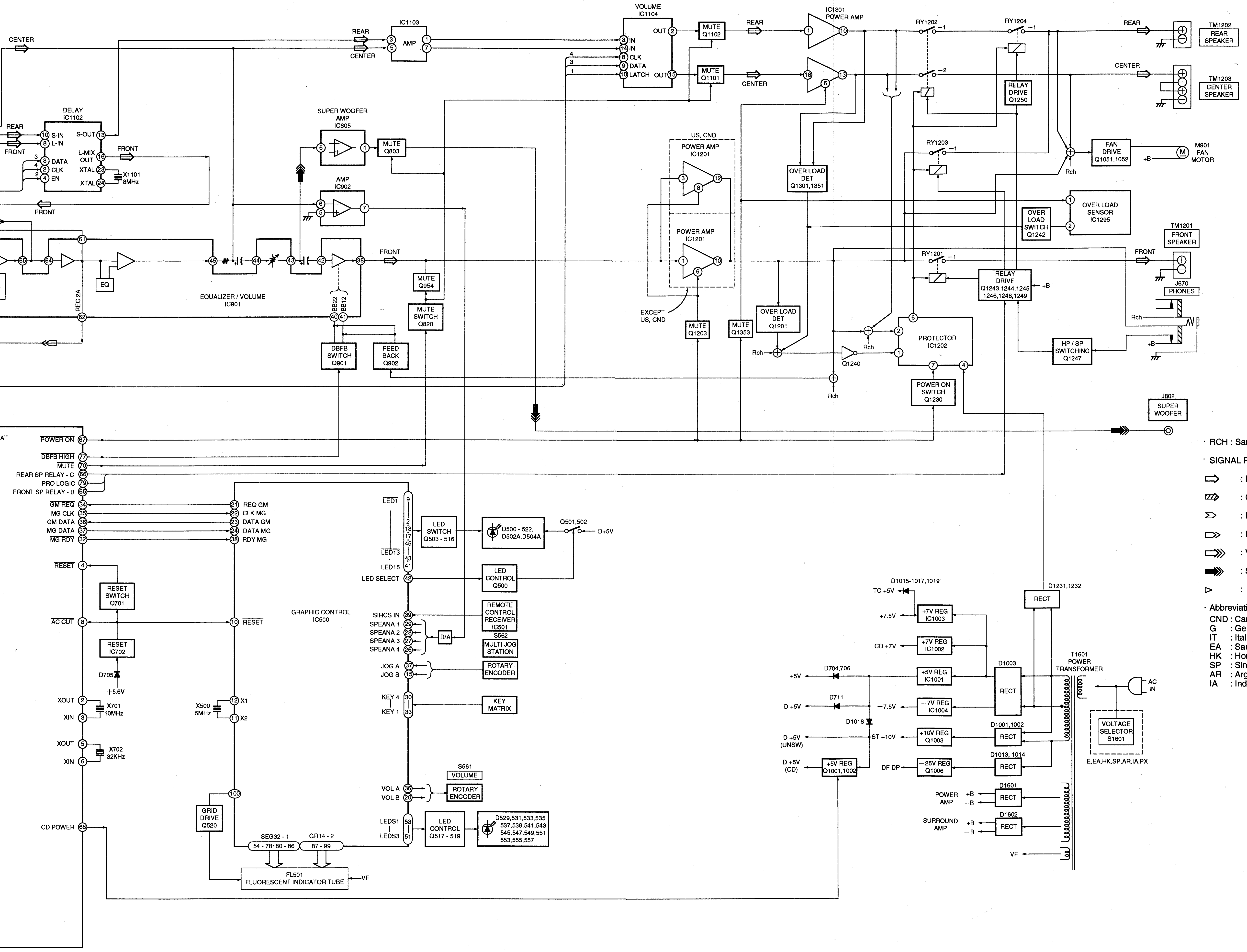
— CD SECTION —


OPTICAL PICK-UP BLOCK
DETECTOR
K
B+
E
A
D
B
C
F
LASER DIODE
FOCUS COIL
TRACKING COIL
2-AXIS DEVICE
T+
T−
F−
F+
FOCUS/TRACKING SERVO. EFM COMPARATOR IC101 (1/2)
35 RF1
36 PD2
38 F
39 E
2 FEI
1 FEO
42 TEO
44 TEI
33 LD
34 PHD
RFO 31
C.OUT 23
SENS 24
FE BIAS 37
FE-O 6
FE-M 7
TA-M 12
TAO 13
DATA 21
XLT 20
CLK 19
FOK 25
FGD 4
XRST 25
RV102 FOCUS GAIN
RV103 TRACKING GAIN
FOCUS BIAS
RV101
B+
LD DRIVE Q101, 102
FOCUS SW Q103
X RESET
TRACKING COIL DRIVE
FOCUS/TRACKING COIL DRIVE IC102 (1/2)
FOCUS COIL DRIVE
SLED/SPINDLE MOTOR DRIVE IC102 (2/2)
SLED MOTOR DRIVE
SPINDLE MOTOR DRIVE
M102 SLED MOTOR
M101 SPINDLE MOTOR
SLED SERVO IC101 (2/2)
16 SLO
SL+ 14
09
CD DIGITAL OUT OPTICAL
DIGITAL OUT IC201
DIGITAL SIGNAL PROCESSOR, CLV SERVO IC103
14 RF
55 CNIN
54 SEIN
DOUT 39
XTAI 34
DATAO XLTO CLKO
MDP FOK
XLON
DATA XLAT CLOK
SCOR SQSO SQCK SENS
XRST
PCMD 21
LRCK 20
BCLK 22
X101 16.9344MHz
DIGITAL FILTER D/A CONVERTER IC104
CKO XTI XTO
2 DATA
1 LRCK
3 BCLK
L OUT 16
R OUT 13
DATA MLAT CLOK
L-CH
R-CH
CD CLK
CD DATA
DF LAT
SCOR
SQ DATA
SQ CLK
SENS
FOCUS SW
XRST
X LAT
C MAIN SECTION (Page 29)
TABLE SENSOR IC702
T. SENS
DISC SENSOR IC703
Q701
DISC SENS
ROTARY ENCODER S811
ENC 1
ENC 2
ENC 3
TURN MOTOR DRIVER IC701
S801 OPEN/CLOSE DET
OPEN
M701 TURN MOTOR
OUT1
OUT2
IN1
IN2
TBL.L
TBL.R
SLIDE MOTOR DRIVER IC801
M801 SLIDE MOTOR
OUT2
OUT1
RIN
FIN
LOAD IN
LOAD OUT

·R CH: Same as L ch
·SIGNAL PATH
▧ : CD
▨: DIGITAL OUT

— MAIN SECTION —


J671
MIX MIC
RV670
MIC LEVEL
MIC AMP
IC670
J801
VIDEO/MD (AUDIO) OUT L
VIDEO/MD (AUDIO) IN L
MUTE Q821
INPUT SELECT
IC802
V
TC
ST
CD
A
B
INH
DOLBY PRO LOGIC
IC1101
C-OUT
S-OUT
L-OUT
LIN
DATA
CLK
EN
REAR
FRONT
DELAY
IC1102
S-IN
L-IN
S-OUT
L-MIX OUT
XTAL
X1101
8MHz
CENTER
MICON INTERFACE
LATCH
REC 2A
EQ
EQUALIZER / VOLUME
IC901
BB22
BB12
DBFB SWITCH Q901
FEED BACK Q902
SUPER WOOFER AMP
IC805
MUTE Q803
AMP
IC902
MUTE Q954
MUTE SWITCH Q820
IC1103
AMP
VOLUME
IC1104
IN
CLK
DATA
LATCH
OUT
MUTE Q1102
MUTE Q1101
IC1301
POWER AMP
US, CND
POWER AMP
IC1201
EXCEPT US, CND
MUTE Q1203
MUTE Q1353
OVER LOAD DET Q1301,1351
OVER LOAD DET Q1201
Rch
Q1240
PB L
REC L
MUTE CONTROL Q823,824
MD/VIDEO
62427 LAT
RELAY REC/PB
A SHUT
B SHUT
B HALF
A HALF
A PLAY
B PLAY
PB A / B
NORM/HIGH
BIAS ON/OFF
RM ON/OFF
NR ON/OFF
REC/PB
PASS/DOL
LM ON/OFF
CAP M H/L
A TRG
B TRG
TRIG H/L
CAP M ON/OFF
ST L
Ⓑ DECK SECTION (Page 26)
COM DIN
COM CLK
COM DATA
STEREO
TUNED
ST CE
MUTE
RDS SIG
L CH
Ⓐ TUNER SECTION (Page 20,22,24)
TBL. L
TBL. R
SCOR
T. SENS
DF LAT
SENS
X RST
CD CLK
CD DATA
FOCUS SW
SQ CLK
SQ DATA
X LAT
DISC SENS
OPEN
ENC - 1
ENC - 2
ENC - 3
LOAD IN
LOAD OUT
Ⓒ CD SECTION (Page 28)
TC RELAY
220 A PLAY
220 B PLAY
TC A
NORM
BIAS OFF
REC MUTE
NR OFF
PB
PASS AMP/DOLBY
LINE MUTE ON
CAP M HIGH
TRG LOW
CAP M ON
VOL LAT
PROLOG LAT
ST MUTE ON
TBL L
TBL R
TBL SENS
XRST
OUT-SW-OPEN
ENCODER - 1
ENCODER - 2
ENCODER - 3
RDS DATA
RDS INT
MASTER CONTROL
IC701
IC251
RDS DECODER
IC250
X81
4.33MHz
AEP,UK,G,IT
09
POWER ON
DBFB HIGH
MUTE
REAR SP RELAY - C
PRO LOGIC
FRONT SP RELAY - B
GM REQ
MG CLK
GM DATA
MG DATA
MG RDY
RESET
RESET SWITCH Q701
AC CUT
RESET IC702
D705
+5.6V
XOUT
XIN
X701
10MHz
X702
32KHz
CD POWER
REQ GM
CLK MG
DATA GM
DATA MG
RDY MG
X500
5MHz
X1
X2
GRAPHIC CONTROL
IC500
GRID DRIVE Q520
SEG32 - 1
54 - 78・80 - 86
GR14 - 2
87 - 99
FL501
FLUORESCENT INDICATOR TUBE
VF
LED1
LED13
LED15
LED SELECT
LED SWITCH Q503 - 516
D500 - 522, D502A,D504A
Q501,502
D+5V
LED CONTROL Q500
SIRCS IN
SPEANA 1
SPEANA 2
SPEANA 3
SPEANA 4
D/A
REMOTE CONTROL RECEIVER IC501
S562
MULTI JOG STATION
JOG A
JOG B
ROTARY ENCODER
KEY 4
KEY 1
KEY MATRIX
S561
VOLUME
VOL A
VOL B
LEDS1
LEDS3
LED CONTROL Q517 - 519
D529,531,533,535 537,539,541,543 545,547,549,551 553,555,557
TC +5V
+7.5V
CD +7V
D704,706
+5V
D711
D +5V
−7.5V
D1018
D +5V (UNSW)
ST +10V
D +5V (CD)
+5V REG Q1001,1002
DF D


CENTER
REAR
FRONT
DELAY IC1102
S-IN
L-IN
DATA
CLK
EN
S-OUT
L-MIX OUT
XTAL
X1101 8MHz
IC1103 AMP
VOLUME IC1104
IN
CLK
DATA
LATCH
OUT
MUTE Q1102
MUTE Q1101
IC1301 POWER AMP
RY1202
RY1204
RY1203
RY1201
RELAY DRIVE Q1250
TM1202 REAR SPEAKER
TM1203 CENTER SPEAKER
TM1201 FRONT SPEAKER
FAN DRIVE Q1051,1052
M901 FAN MOTOR
Rch
+B
SUPER WOOFER AMP IC805
MUTE Q803
AMP IC902
US, CND
POWER AMP IC1201
EXCEPT US, CND
OVER LOAD DET Q1301,1351
OVER LOAD SWITCH Q1242
OVER LOAD SENSOR IC1295
RELAY DRIVE Q1243,1244,1245 1246,1248,1249
J670 PHONES
HP / SP SWITCHING Q1247
EQUALIZER / VOLUME IC901
EQ
REC 2A
BB22
BB12
MUTE Q954
MUTE SWITCH Q820
DBFB SWITCH Q901
FEED BACK Q902
MUTE Q1203
MUTE Q1353
OVER LOAD DET Q1201
PROTECTOR IC1202
Q1240
POWER ON SWITCH Q1230
J802 SUPER WOOFER
POWER ON
DBFB HIGH
MUTE
REAR SP RELAY - C
PRO LOGIC
FRONT SP RELAY - B
GM REQ
MG CLK
GM DATA
MG DATA
MG RDY
RESET
RESET SWITCH Q701
AC CUT
RESET IC702
D705
+5.6V
XOUT
XIN
X701 10MHz
X702 32KHz
CD POWER
REQ GM
CLK MG
DATA GM
DATA MG
RDY MG
X500 5MHz
X1
X2
GRAPHIC CONTROL IC500
LED1
LED13
LED15
LED SELECT
SIRCS IN
SPEANA 1
SPEANA 2
SPEANA 3
SPEANA 4
D/A
JOG A
JOG B
KEY 4
KEY 1
VOL A
VOL B
LEDS1
LEDS3
LED SWITCH Q503 - 516
D500 - 522, D502A,D504A
Q501,502
D+5V
LED CONTROL Q500
REMOTE CONTROL RECEIVER IC501
S562 MULTI JOG STATION
ROTARY ENCODER
KEY MATRIX
S561 VOLUME
ROTARY ENCODER
LED CONTROL Q517 - 519
D529,531,533,535 537,539,541,543 545,547,549,551 553,555,557
GRID DRIVE Q520
SEG32 - 1
54 - 78 - 80 - 86
GR14 - 2
87 - 99
FL501 FLUORESCENT INDICATOR TUBE
VF
D1015-1017,1019
TC +5V
+7.5V
+7V REG IC1003
CD +7V
+7V REG IC1002
D704,706
+5V
+5V REG IC1001
D711
D +5V
−7.5V
−7V REG IC1004
D1018
D +5V (UNSW)
ST +10V
+10V REG Q1003
D +5V (CD)
+5V REG Q1001,1002
DF DP
−25V REG Q1006
D1003
RECT
D1001,1002
D1013, 1014
D1231,1232
POWER AMP
SURROUND AMP
D1601
D1602
T1601 POWER TRANSFORMER
VOLTAGE SELECTOR S1601
E,EA,HK,SP,AR,IA,PX
AC IN

- RCH : Same as L ch

- SIGNAL PATH

⇨ : FM

⇨ : CD

⋗ : PB

⇨ : REC

⇨ : VIDEO

➡ : SUPER WOOFER

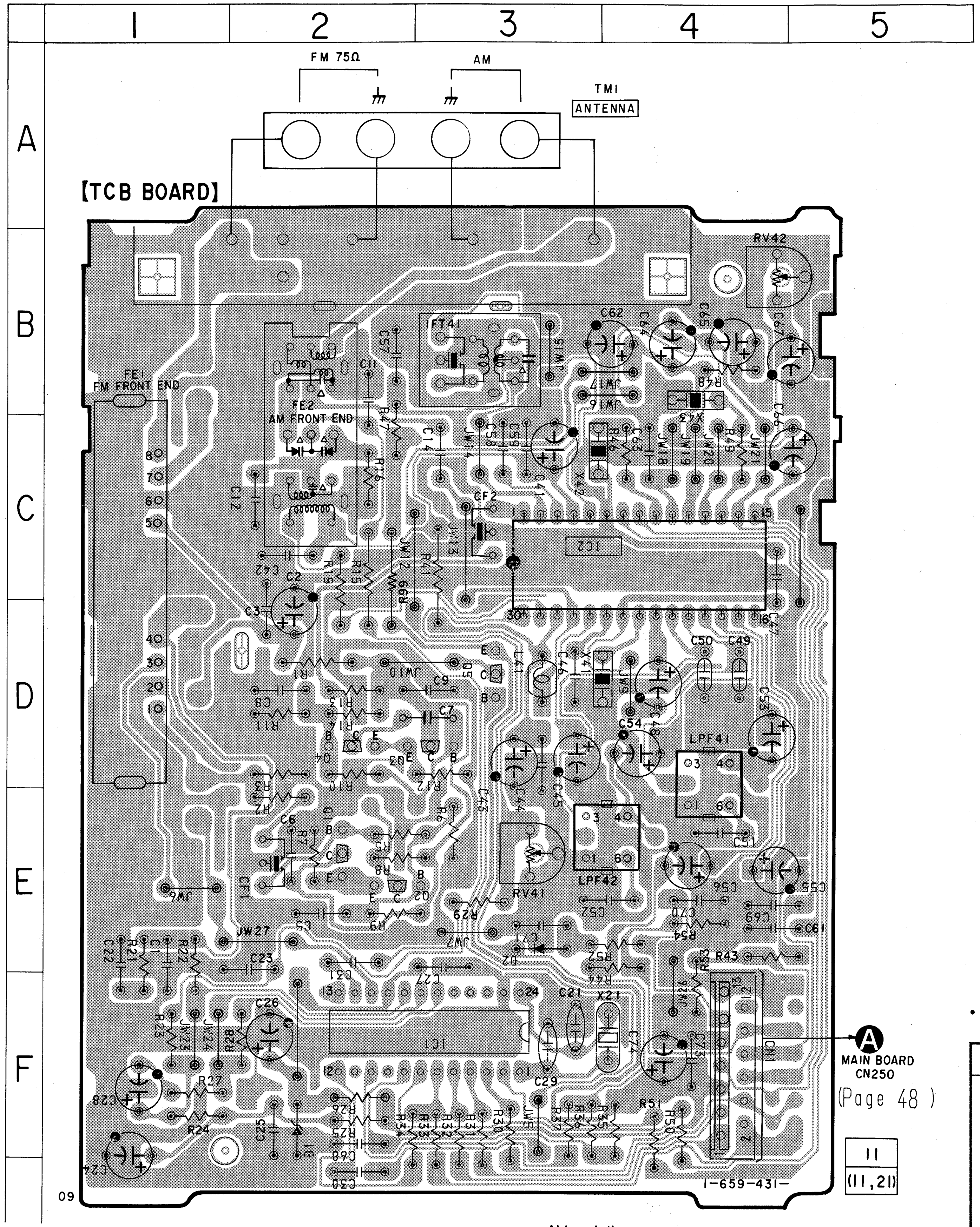
▷ : MIC

- Abbreviation

CND : Canadian model.
G : German model.
IT : Italian model.
EA : Saudi Arabia model.
HK : Hong Kong model.
SP : Singapore model.
AR : Argentine model.
IA : Indonesian model.

6-3. PRINTED WIRING BOARD — TUNER SECTION — (US, CND, E2, AR, AUS, TH MODEL)

• See page 18 for Circuit Boards Location.


1
2
3
4
5
A
B
C
D
E
F
FM 75Ω
AM
TMI ANTENNA
[TCB BOARD]
RV42
FE1 FM FRONT END
FE2 AM FRONT END
IFT41
IC2
IC1
LPF41
LPF42
RV41
X21
X42
X43
CF1
CF2
CN1
A MAIN BOARD CN250
(Page 48)
09
1-659-431-
11
(11,21)

• Semiconductor Location

Ref. No.	Location
D1	F-2
D2	E-3
IC1	F-3
IC2	C-3
Q1	E-2
Q2	E-2
Q3	D-2
Q4	D-2
Q5	D-3

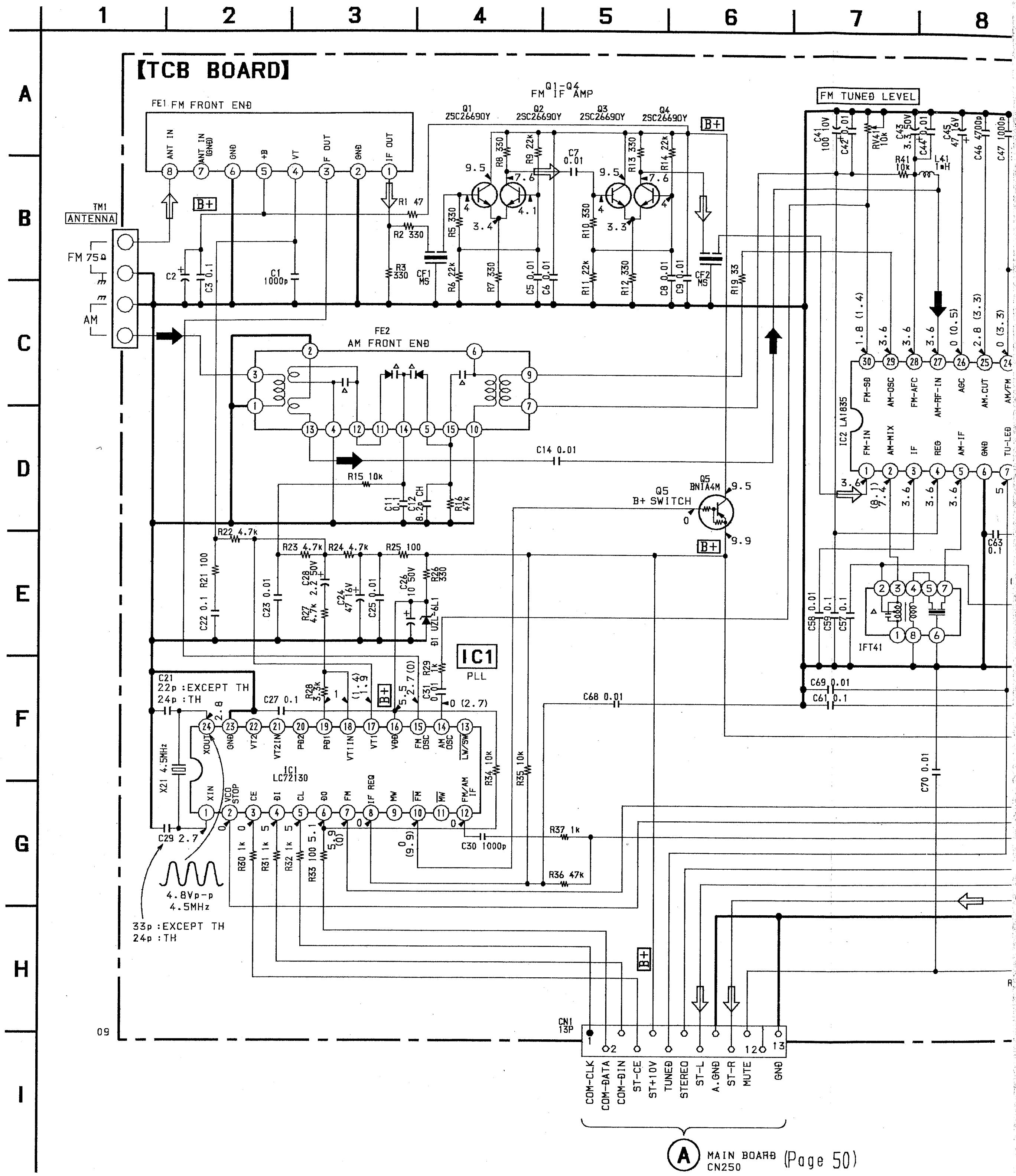
Note:

- o—— : parts extracted from the component side.
- Δ : Internal component.
- ▨ : Pattern from the side which enable seeing.

- Abbreviation
  - CND : Canadian model.
  - AUS : Australian model.
  - AR : Argentine model.
  - TH : Thialand model.
  - E2 : Without SW tuner model.

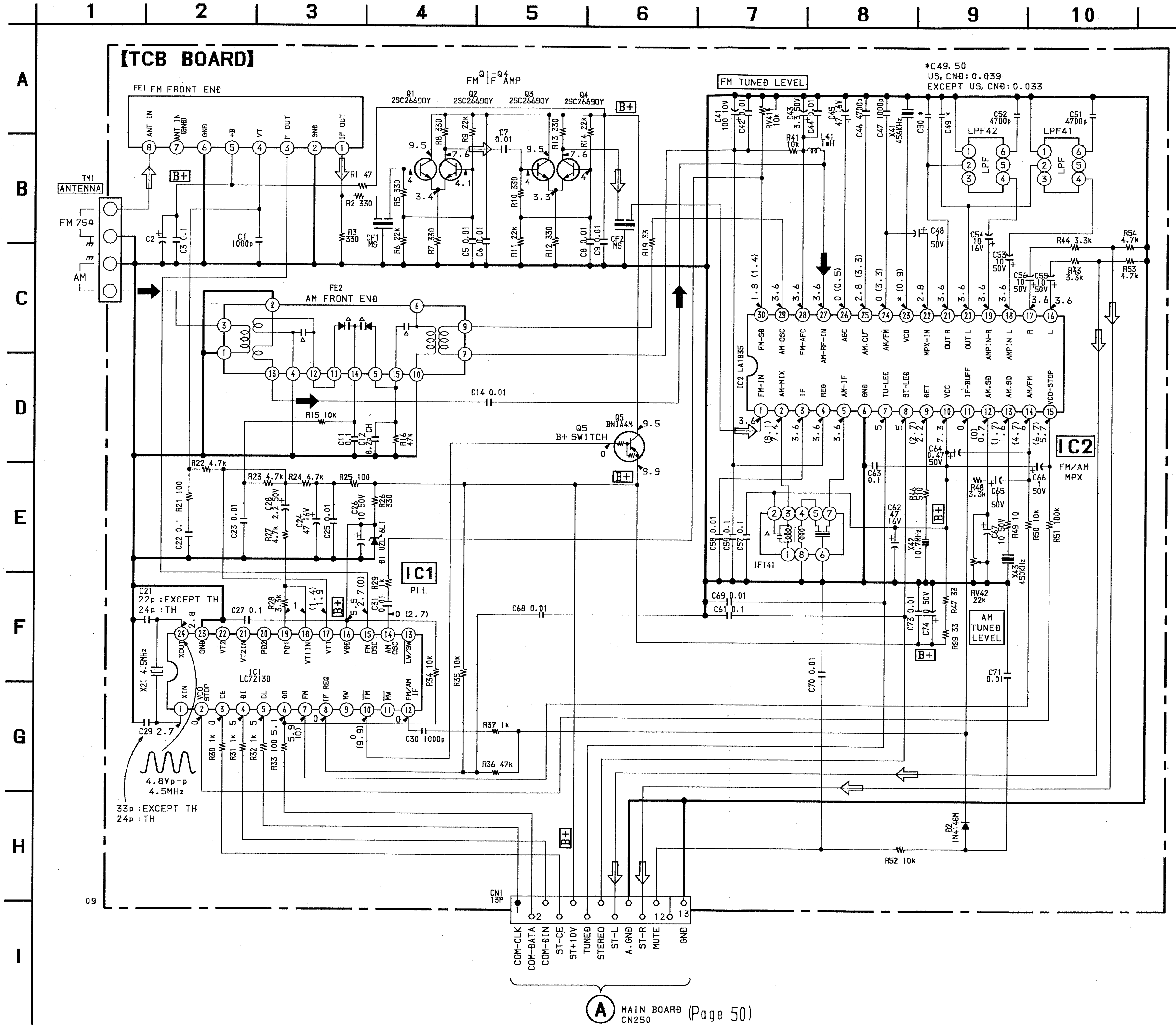
6-4. SCHEMATIC DIAGRAM — TUNER SECTION — (US, CND, E2, AR, AUS, TH MODEL)

• See page 44 for IC Block Diagrams.


1
2
3
4
5
6
7
8
A
B
C
D
E
F
G
H
I
[TCB BOARD]
FE1 FM FRONT END
Q1-Q4 FM IF AMP
Q1 2SC2669OY
Q2 2SC2669OY
Q3 2SC2669OY
Q4 2SC2669OY
FM TUNED LEVEL
TM1 ANTENNA
FM 75Ω
AM
FE2 AM FRONT END
IC2 LA1835
Q5 BN1A4M B+ SWITCH
IFT41
IC1 PLL
IC1 LC72130
X21 4.5MHz
4.8Vp-p 4.5MHz
33p :EXCEPT TH
24p :TH
C21 22p :EXCEPT TH 24p :TH
CN1 13P
COM-CLK
COM-DATA
COM-DIN
ST-CE
ST+10V
TUNED
STEREO
ST-L
A.GND
ST-R
MUTE
GND
A MAIN BOARD CN250
(Page 50)
09

6-4. SCHEMATIC DIAGRAM — TUNER SECTION — (US, CND, E2, AR, AUS, TH MODEL)

- See page 44 for IC Block Diagrams.


1 2 3 4 5 6 7 8 9 10 11 12 13 14
A B C D E F G H I
[TCB BOARD]
FE1 FM FRONT END
Q1-Q4 FM IF AMP
Q1 2SC2669OY
Q2 2SC2669OY
Q3 2SC2669OY
Q4 2SC2669OY
TM1 ANTENNA
FM 75Ω
AM
FE2 AM FRONT END
Q5 B+ SWITCH
Q5 BN1A4M
IC1 PLL
IC1 LC72130
IC2 LA1835
IC2 FM/AM MPX
FM TUNED LEVEL
AM TUNED LEVEL
*C49, 50 US, CND: 0.039 EXCEPT US, CND: 0.033
LPF42
LPF41
IFT41
C21 22p :EXCEPT TH 24p :TH
X21 4.5MHz
4.8Vp-p 4.5MHz
33p :EXCEPT TH 24p :TH
D1 UZ-6.2
D2 1N4148M
R52 10k
CN1 13P
COM-CLK
COM-DATA
COM-DIN
ST-CE
ST+10V
TUNED
STEREO
ST-L
A.GND
ST-R
MUTE
GND
MAIN BOARD CN250 (Page 50)

NOTE

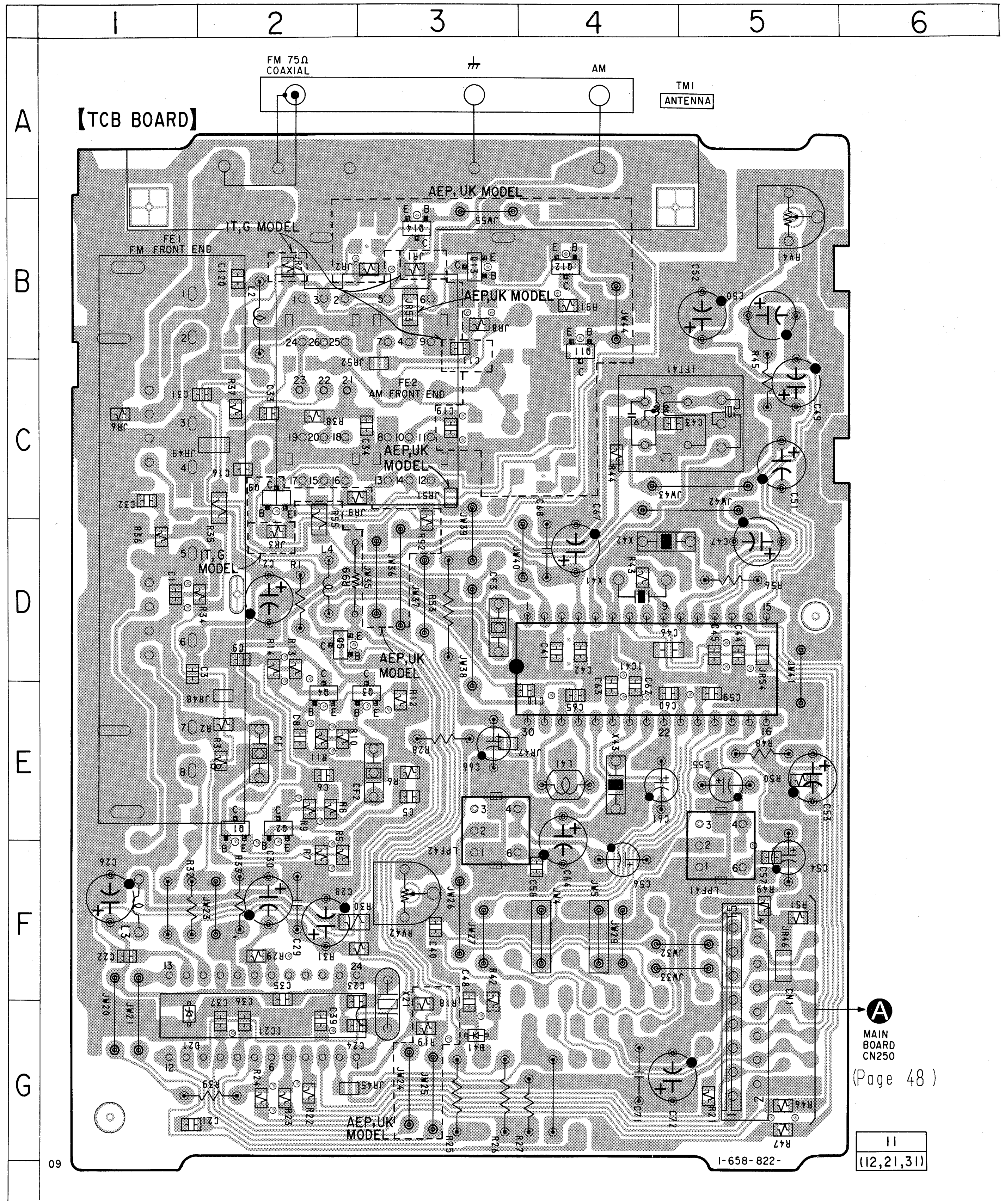
- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.
- [B+] : B+ Line.
- ▭ : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark: FM
  ( ) : AM
  * : can not be measured.
- Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Abbreviation
  CND: Canadian model.
  AR : Argentine model.
  AUS: Australian model.
  TH : Thailand model.
  E2 : Without SW tuner model.
- Signal path.
  ⇨ : FM
  ➡ : AM

- **Semiconductor Location**

Ref. No.	Location
D1 D2	F-2 E-3
IC1 IC2	F-3 C-3
Q1 Q2 Q3 Q4 Q5	E-2 E-2 D-2 D-2 D-3

6-5. PRINTED WIRING BOARD — TUNER SECTION — (AEP, UK, G, IT MODEL)

- See page 18 for Circuit Boards Location.



1
2
3
4
5
6
A
B
C
D
E
F
G
【TCB BOARD】
FM 75Ω COAXIAL
AM
TM1 ANTENNA
FE1 FM FRONT END
IT,G MODEL
AEP,UK MODEL
FE2 AM FRONT END
IFT41
IC41
IC21
MAIN BOARD CN250
(Page 48)
CN1
09
1-658-822-
11
(12,21,31)

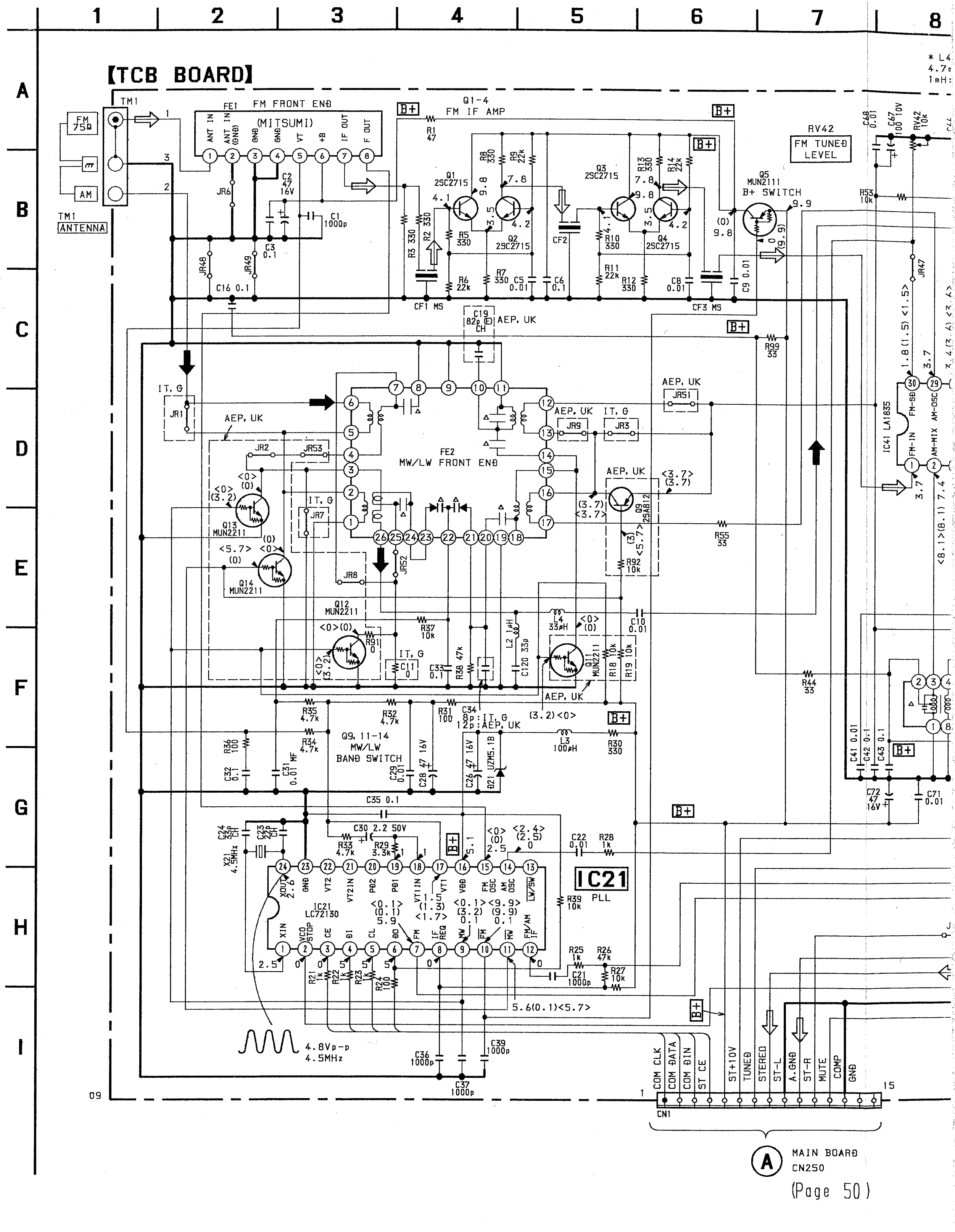
- **Semiconductor Location**

Ref. No.	Location
D21	G-1
D41	G-3
IC21	G-2
IC41	D-4
Q1	E-2
Q2	E-2
Q3	E-3
Q4	E-2
Q5	D-2
Q9	C-2
Q11	B-4
Q12	B-4
Q13	B-3
Q14	B-3

Note:
- o—— : parts extracted from the component side.
- △ : Internal component.
- ▨ : Pattern from the side which enable seeing.

- Abbreviation
  - G : German model.
  - IT : Italian model.

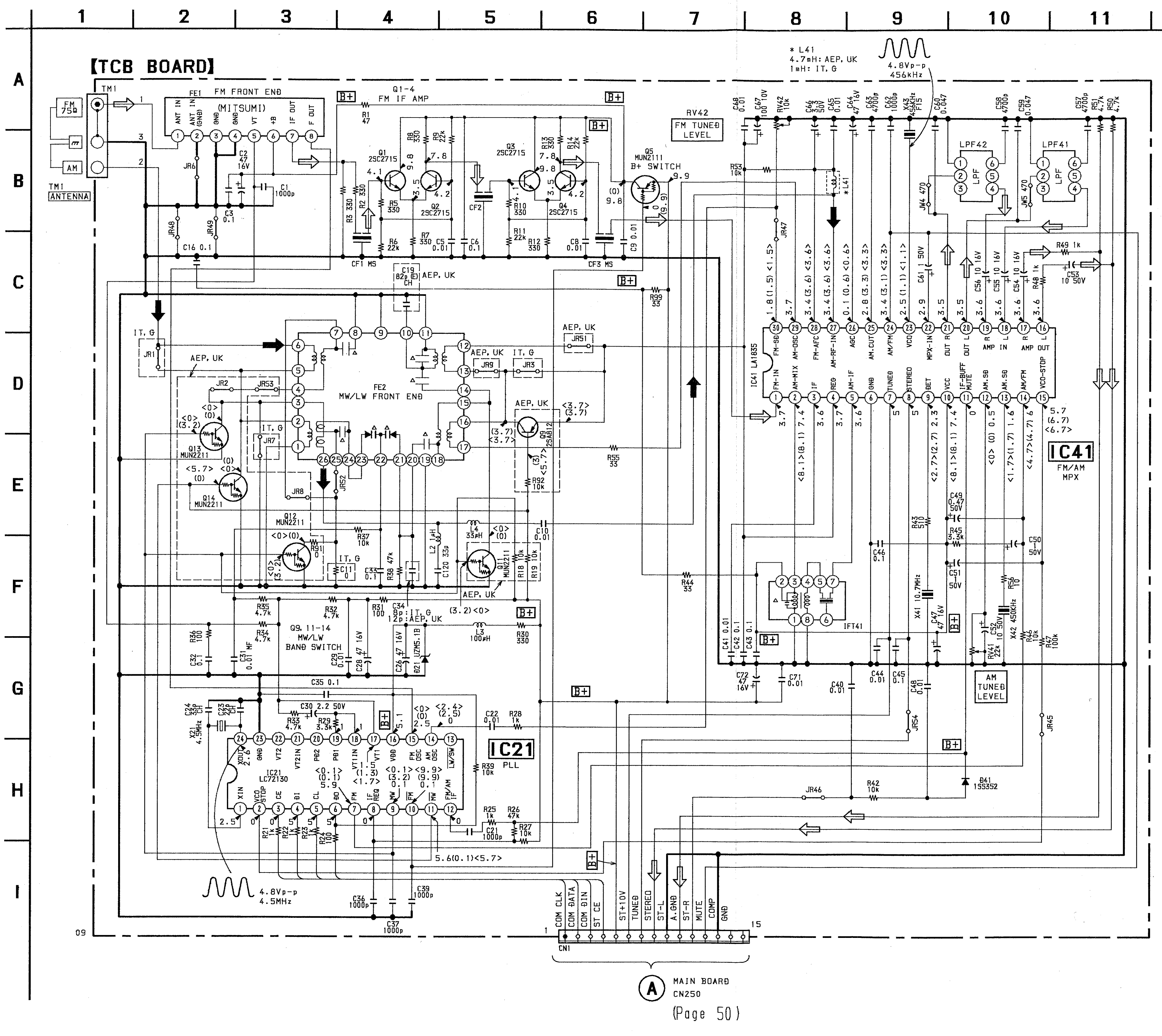
6-6. SCHEMATIC DIAGRAM — TUNER SECTION — (AEP, UK, G, IT MODEL)



1
2
3
4
5
6
7
8
A
B
C
D
E
F
G
H
I
【TCB BOARD】
TM1
FM 75Ω
AM
TM1 ANTENNA
FE1 FM FRONT END (MITSUMI)
Q1-4 FM IF AMP
Q1 2SC2715
Q2 2SC2715
Q3 2SC2715
Q4 2SC2715
Q5 MUN2111 B+ SWITCH
RV42 FM TUNED LEVEL
CF1 MS
CF2
CF3 MS
FE2 MW/LW FRONT END
AEP, UK
IT, G
Q13 MUN2211
Q14 MUN2211
Q12 MUN2211
Q11 MUN2211
Q9 2SA812
Q9, 11-14 MW/LW BAND SWITCH
IC41 LA1835
IC21 PLL
IC21 LC72130
X21 4.5MHz
4.8Vp-p 4.5MHz
CN1
COM CLK
COM DATA
COM DIN
ST CE
ST+10V
TUNED
STEREO
ST-L
A.GND
ST-R
MUTE
COMP
GND
A MAIN BOARD CN250
(Page 50)
09

6-6. SCHEMATIC DIAGRAM — TUNER SECTION — (AEP, UK, G, IT MODEL)

6


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
A
B
C
D
E
F
G
H
I
【TCB BOARD】
TM1
FM 75Ω
AM
TM1 ANTENNA
FE1 FM FRONT END (MITSUMI)
Q1-4 FM IF AMP
B+
Q1 2SC2715
Q2 2SC2715
Q3 2SC2715
Q4 2SC2715
Q5 MUN2111 B+ SWITCH
CF1 MS
CF2
CF3 MS
RV42 FM TUNED LEVEL
* L41 4.7mH: AEP, UK 1mH: IT, G
4.8Vp-p 456kHz
LPF42
LPF41
LPF
FE2 MW/LW FRONT END
AEP, UK
IT, G
Q9 2SA812
Q11 MUN2211
Q12 MUN2211
Q13 MUN2211
Q14 MUN2211
Q9, 11-14 MW/LW BAND SWITCH
IC41 LA1835
IC41 FM/AM MPX
IFT41
X41 10.7MHz
X42 450kHz
AM TUNED LEVEL
D41 1SS352
IC21 LC72130
IC21 PLL
X21 4.5MHz
D21 UZM5.1B
4.8Vp-p 4.5MHz
CN1
COM CLK
COM DATA
COM DIN
ST CE
ST+10V
TUNED
STEREO
ST-L
A.GND
ST-R
MUTE
COMP
GND
Ⓐ MAIN BOARD CN250

(Page 50)

Ⓐ MAIN BOARD CN250

(Page 48)

11
(12,21,31)

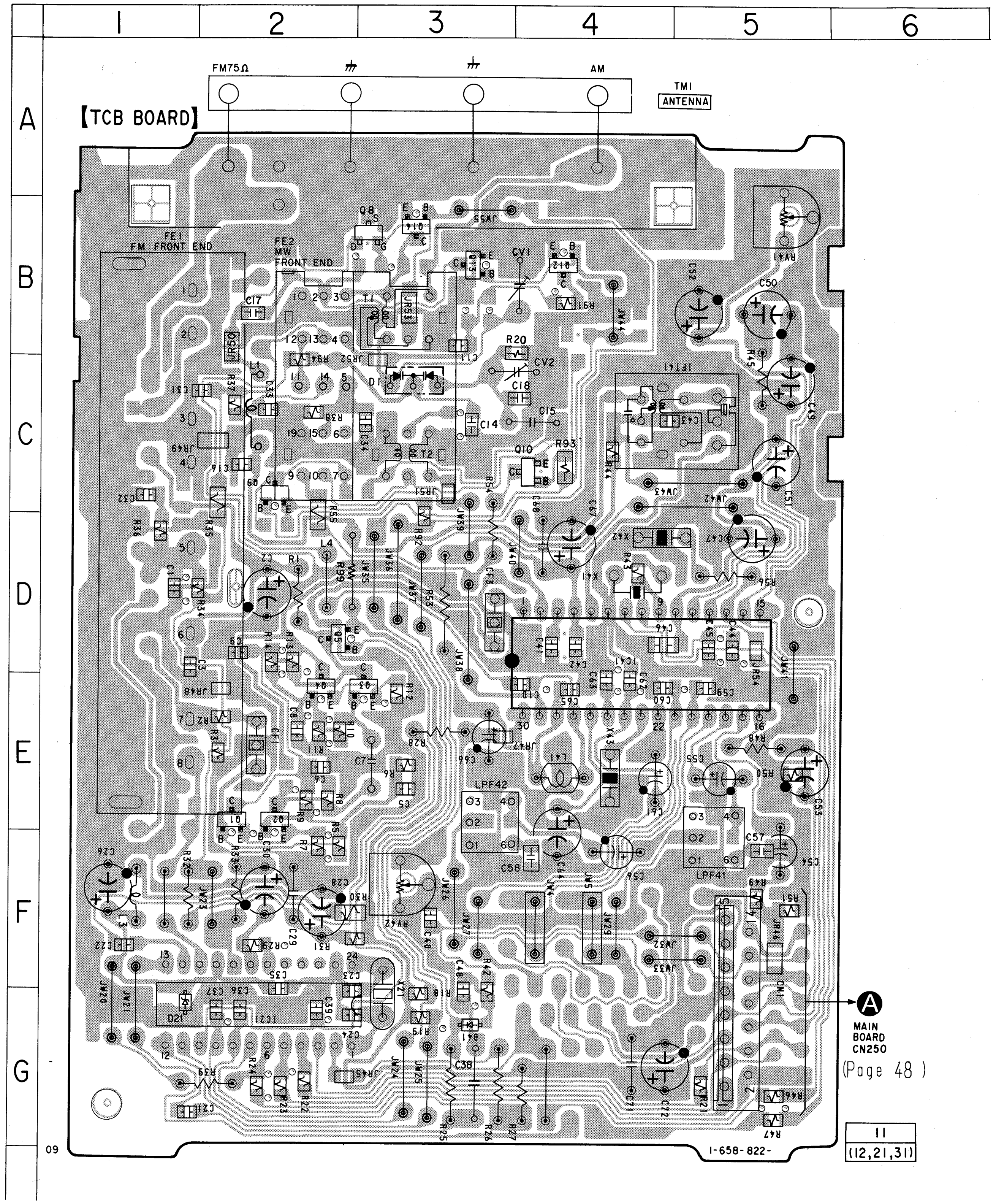
NOTE

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- △ :internal component.
- ▭ :panel designation.
- B+ :B+ Line.
- ▭ :adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark:FM
  ( ) :MW
  < >:LW
- Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Abbreviation
  G :German model.
  IT :Italian model.
- Signal path.
  ⇨ :FM
  ➡ :AM

- **Semiconductor Location**

Ref. No.	Location
D21	G-1
D41	G-3
IC21	G-2
IC41	D-4
Q1	E-2
Q2	E-2
Q3	E-3
Q4	E-2
Q5	D-2
Q9	C-2
Q11	B-4
Q12	B-4
Q13	B-3
Q14	B-3

6-7. PRINTED WIRING BOARD — TUNER SECTION —
(E3, EA, HK, SP, MY, IA, PX MODEL)
• See page 18 for Circuit Boards Location.


【TCB BOARD】
TM1 ANTENNA
FM75Ω
AM
FE1 FM FRONT END
FE2 MW FRONT END
IC21
IC41
LPF41
LPF42
IFT41
CN1
A MAIN BOARD CN250
(Page 48)
11 (12,21,31)
1-658-822-
09

Note:

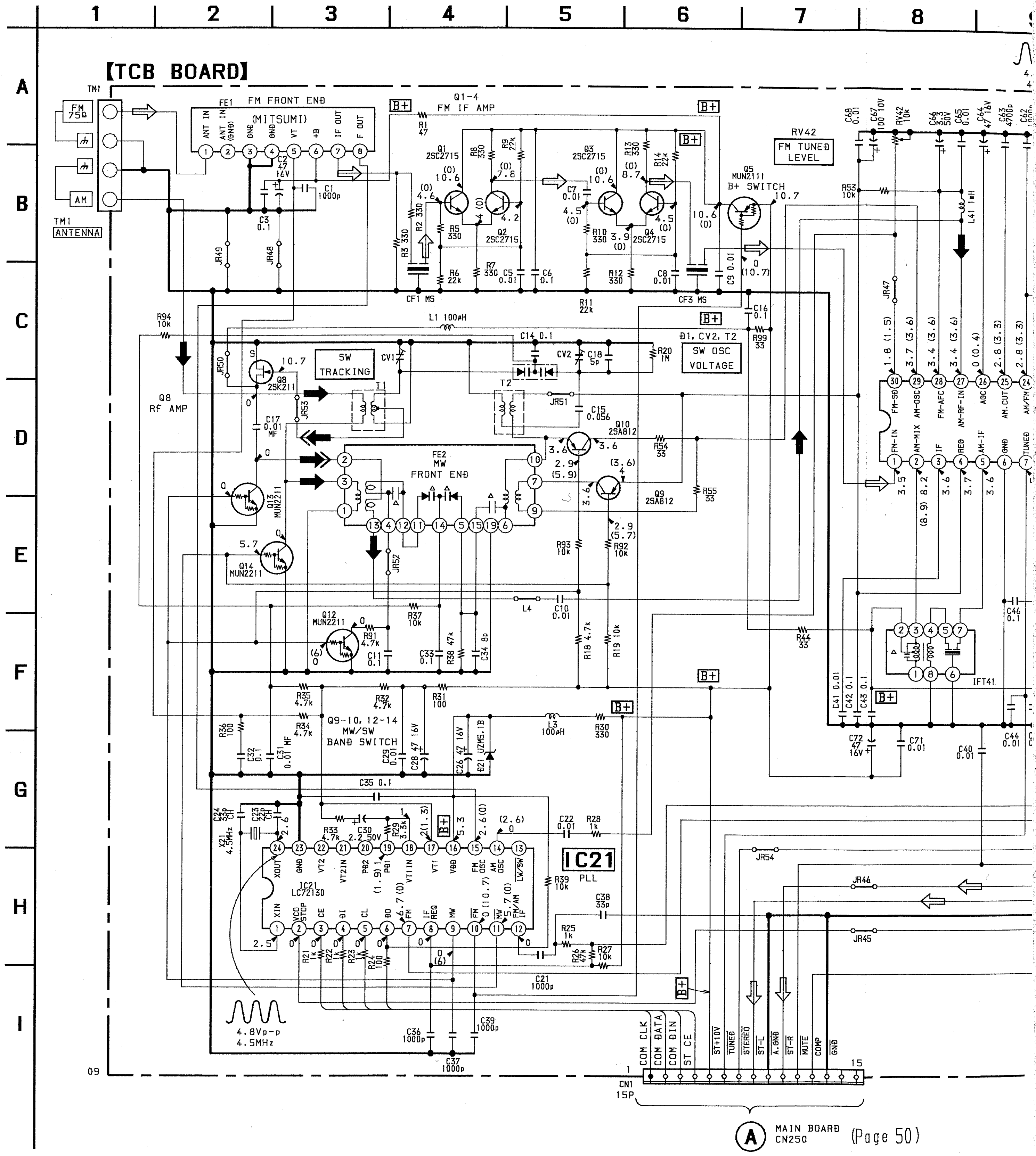
- ○—— : parts extracted from the component side.
- △ : Internal component.
- ▨ : Pattern from the side which enable seeing.

- Abbreviation
  EA : Saudi Arabia model.
  SP : Singapore model.
  MY : Malaysia model.
  HK : Hong Kong model.
  IA : Indonesian model.
  E3 : With SW tuner model.

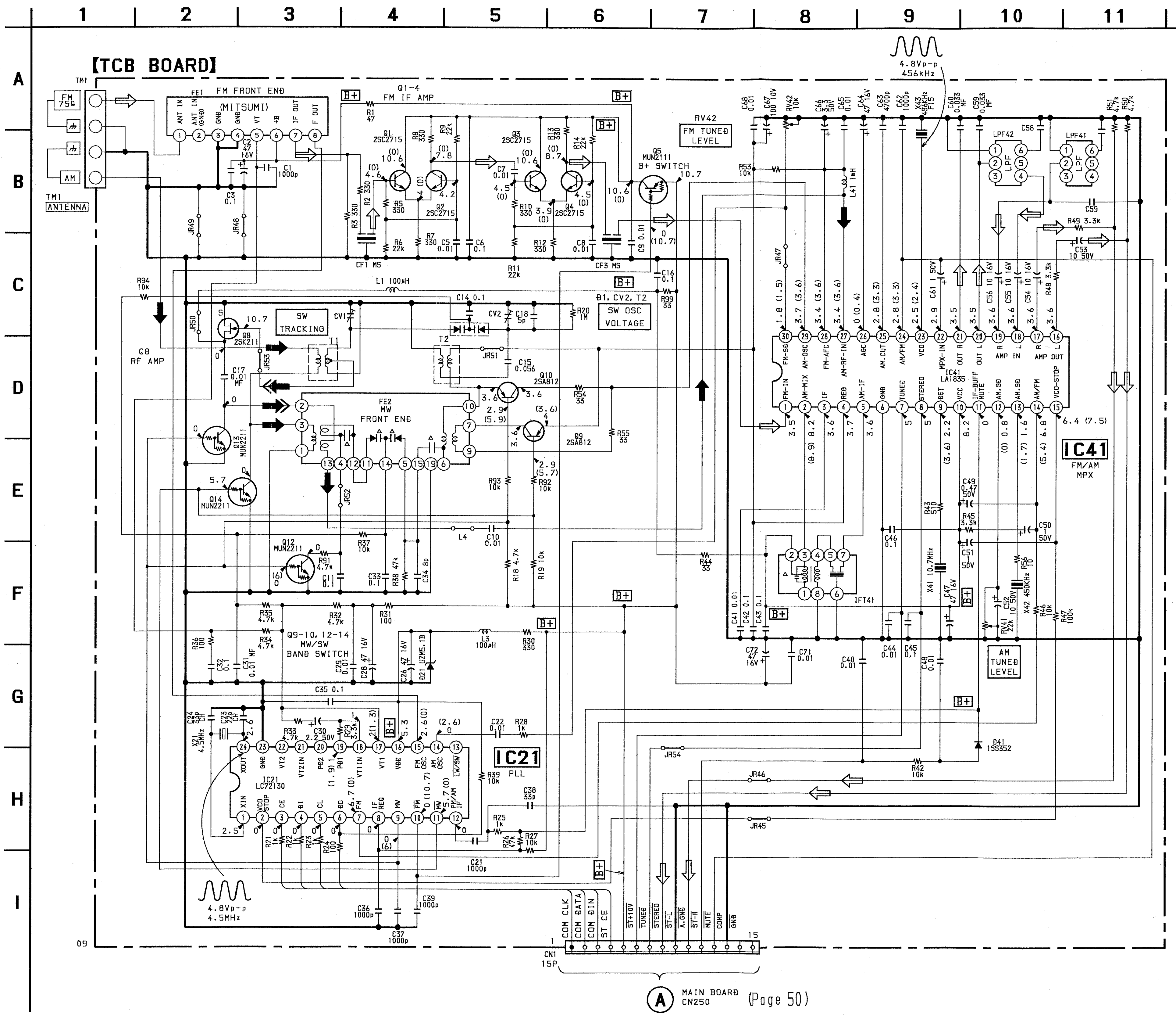
- **Semiconductor Location**

Ref. No.	Location
D1	C-3
D21	G-1
D41	G-4
IC21	G-2
IC41	E-5
Q1	F-2
Q2	F-3
Q3	E-3
Q4	E-3
Q5	E-3
Q8	B-3
Q9	D-3
Q10	D-4
Q12	B-5
Q13	B-4
Q14	B-3

6-8. SCHEMATIC DIAGRAM — TUNER SECTION —
(E3, EA, HK, SP, MY, IA, PX MODEL)


【TCB BOARD】
TM1 ANTENNA
FE1 FM FRONT END (MITSUMI)
Q1-4 FM IF AMP
Q1 2SC2715
Q2 2SC2715
Q3 2SC2715
Q4 2SC2715
Q5 MUN2111 B+ SWITCH
RV42 FM TUNED LEVEL
Q8 2SK211 RF AMP
SW TRACKING
FE2 MW FRONT END
Q9 2SA812
Q10 2SA812
D1, CV2, T2 SW OSC VOLTAGE
Q13 MUN2211
Q14 MUN2211
Q12 MUN2211
Q9-10, 12-14 MW/SW BAND SWITCH
IC21 LC72130
IC21 PLL
X21 4.5MHz
4.8Vp-p 4.5MHz
IFT41
CN1 15P
COM CLK
COM DATA
COM DIN
ST CE
ST+10V
TUNED
STEREO
ST-L
A.GND
ST-R
MUTE
COMP
GND
A MAIN BOARD CN250
(Page 50)
09

6-8. SCHEMATIC DIAGRAM — TUNER SECTION —
(E3, EA, HK, SP, MY, IA, PX MODEL)


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
A B C D E F G H I
[TCB BOARD]
TM1 ANTENNA
FM 75Ω
AM
FE1 FM FRONT END (MITSUMI)
ANT IN (GND), ANT IN, GND, GND, VT, +B, IF OUT, F OUT
Q1-4 FM IF AMP
Q1 2SC2715
Q2 2SC2715
Q3 2SC2715
Q4 2SC2715
Q5 MUN2111 B+ SWITCH
RV42 FM TUNED LEVEL
CF1 MS
CF3 MS
L1 100µH
SW TRACKING
CV1
CV2
T1
T2
D1, CV2, T2 SW OSC VOLTAGE
Q8 2SK211
Q8 RF AMP
Q13 MUN2211
Q14 MUN2211
FE2 MW FRONT END
Q10 2SA812
Q9 2SA812
Q12 MUN2211
Q9-10, 12-14 MW/SW BAND SWITCH
L3 100µH
D21 UZM5.1B
L4
IC21 LC72130
IC21 PLL
XIN, VCO STOP, CE, DI, CL, DO, IF REQ, MW, FM, LW/SW
XOUT, GND, VT2, VT2IN, PD2, PD1, VT1IN, VT1, VDD, FM OSC, AM OSC
X21 4.5MHz
4.8Vp-p 4.5MHz
4.8Vp-p 456kHz
X43 456kHz
LPF42
LPF41
IC41 LA1835
IC41 FM/AM MPX
FM-SD, AM-MIX, AM-OSC, FM-AFC, AM-RF-IN, AGC, AM.CUT, AM/FM, VCO, MPX-IN, OUT R, OUT L, AMP IN, AMP OUT
FM-IN, AM-MIX, IF, REG, AM-IF, GND, TUNED, STEREO, DET, VCC, IF-BUFF MUTE, AM.SD, AM.SD, AM/FM, VCO-STOP
IFT41
X41 10.7MHz
X42 450kHz
L41 1mH
RV41 AM TUNED LEVEL
D41 1SS352
JR45
JR46
JR54
CN1 15P
COM CLK, COM DATA, COM DIN, ST CE, ST+10V, TUNED, STEREO, ST-L, A.GND, ST-R, MUTE, COMP, GND
B+
(A) MAIN BOARD CN250 (Page 50)

NOTE

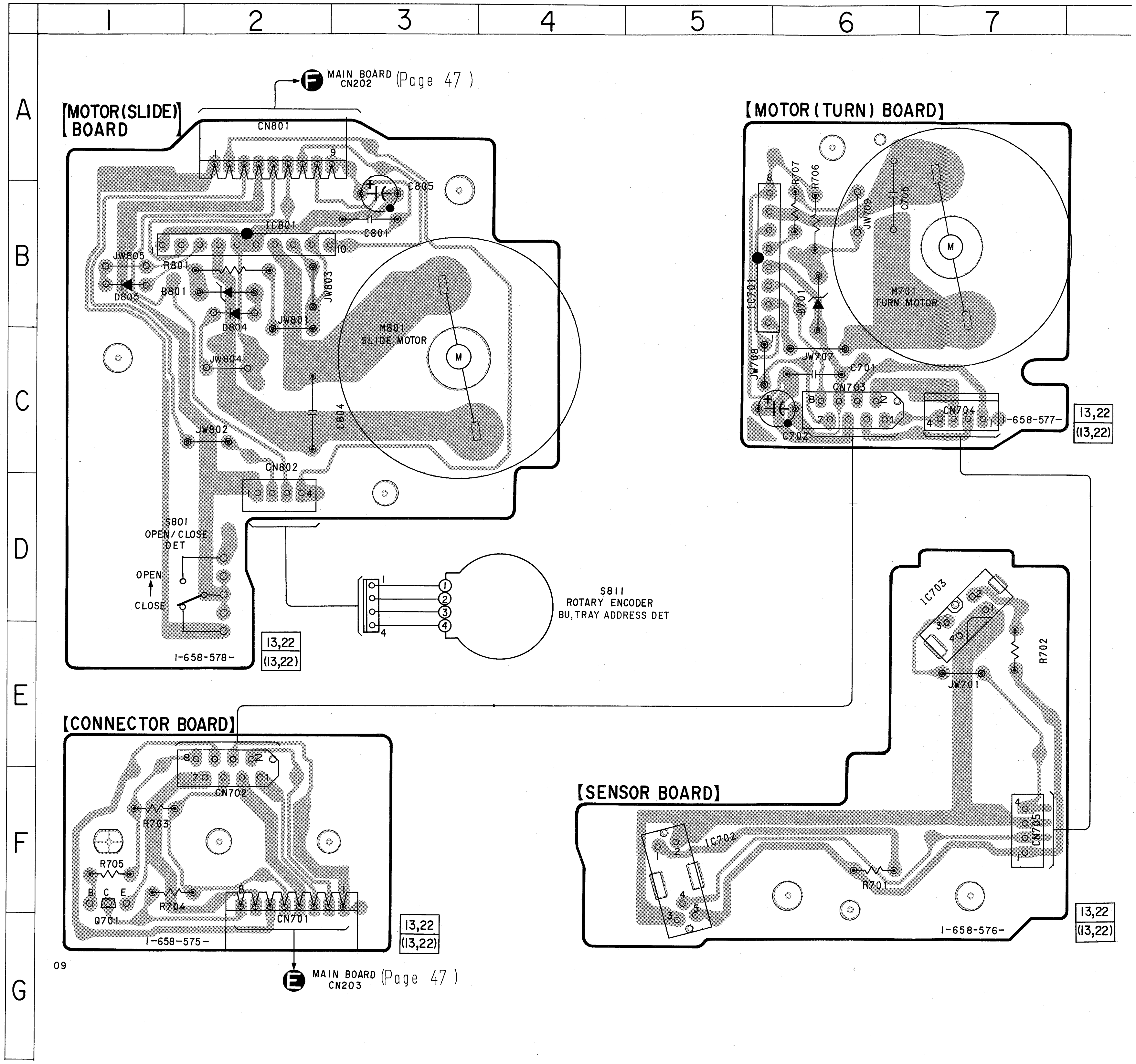
- All capacitors are in µF unless otherwise noted. pF: µµF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.
- B+ : B+ Line.
- ▭ : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark: FM
  ( ) : AM
- Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Abbreviation
  EA : Saudi Arabia model.
  HK : Hong Kong model.
  SP : Singapore model.
  MY : Malaysia model.
  IA : Indonesian model.
  E3 : With SW tuner model.
- Signal path.
  ⇨ : FM
  ➡ : MW
  ➡» : SW

- **Semiconductor Location**

Ref. No.	Location
D1	C-3
D21	G-1
D41	G-4
IC21	G-2
IC41	E-5
Q1	F-2
Q2	F-3
Q3	E-3
Q4	E-3
Q5	E-3
Q8	B-3
Q9	D-3
Q10	D-4
Q12	B-5
Q13	B-4
Q14	B-3

6-9. PRINTED WIRING BOARD — CD MOTOR SECTION —

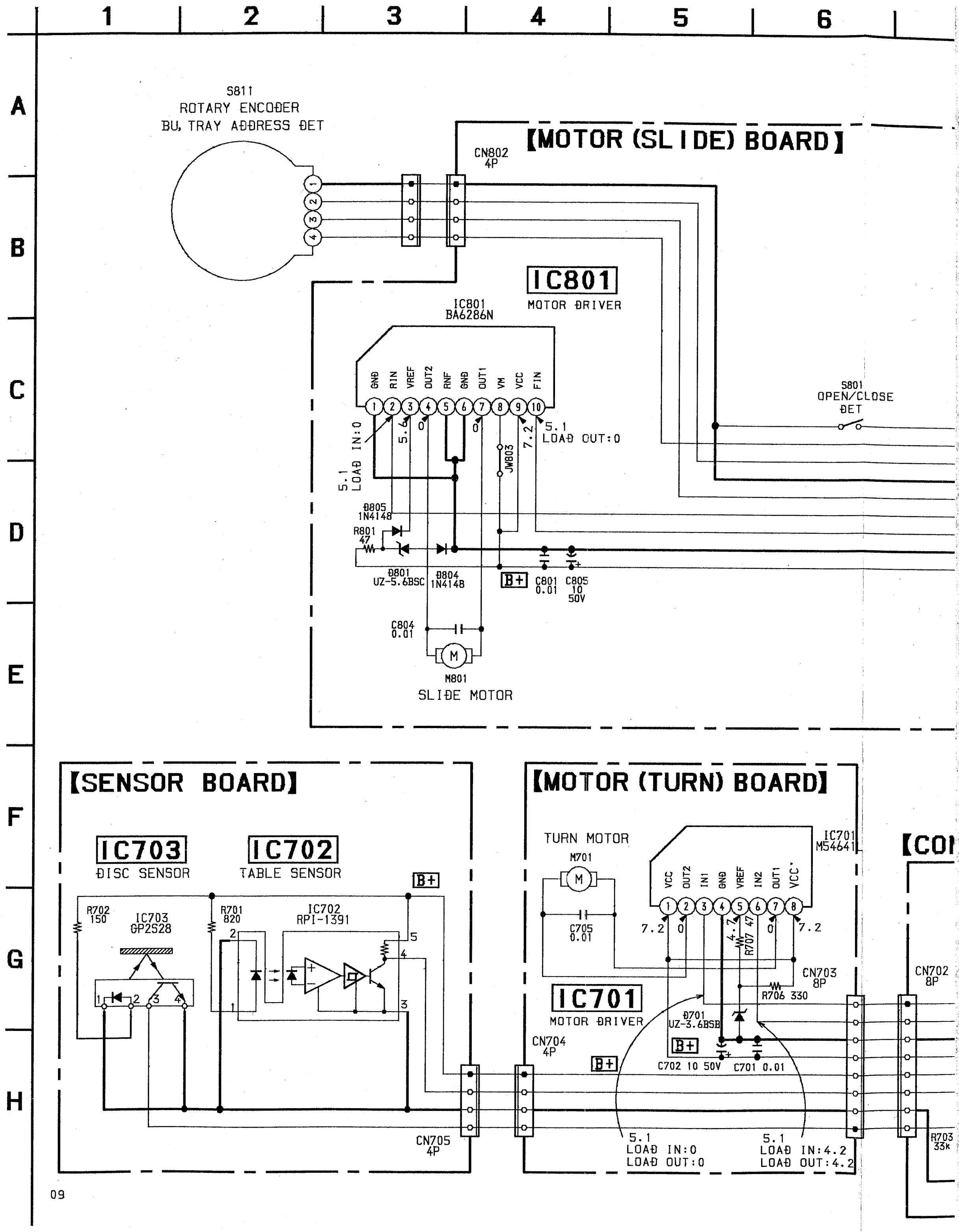
• See page 18 for Circuit Boards Location.

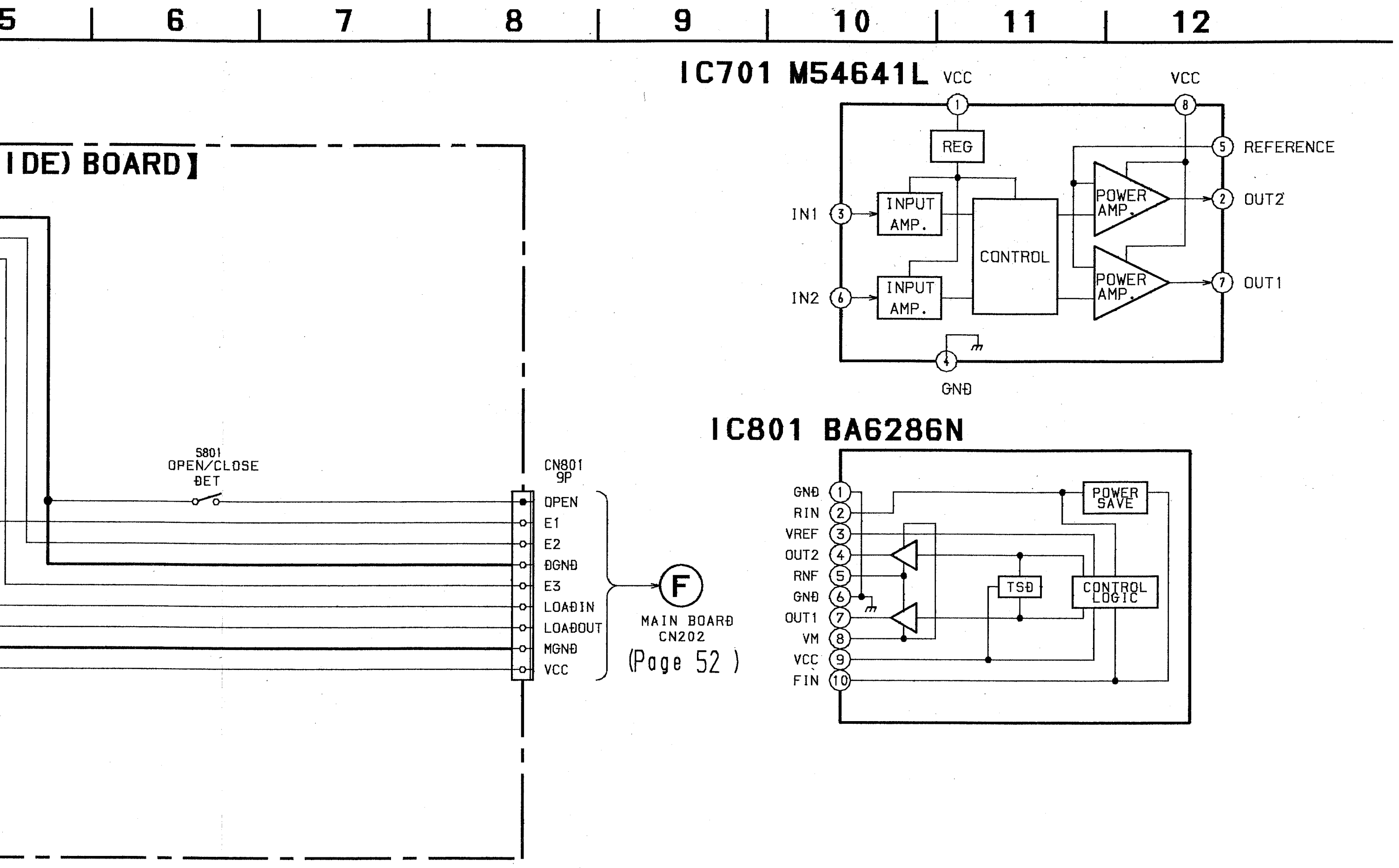

1
2
3
4
5
6
7
A
B
C
D
E
F
G
F MAIN BOARD CN202 (Page 47)
[MOTOR(SLIDE) BOARD]
CN801
1
9
C805
IC801
C801
10
JW805
R801
D805
D801
JW803
D804
JW801
M801 SLIDE MOTOR
JW804
C804
JW802
CN802
1
4
S801 OPEN/CLOSE DET
OPEN
CLOSE
13,22 (13,22)
1-658-578-
S811 ROTARY ENCODER BU,TRAY ADDRESS DET
[MOTOR(TURN) BOARD]
R707
R706
C705
JW709
IC701
D701
M701 TURN MOTOR
JW708
JW707
C701
CN703
C702
CN704
1-658-577-
13,22 (13,22)
IC703
R702
JW701
[SENSOR BOARD]
IC702
CN705
R701
1-658-576-
13,22 (13,22)
[CONNECTOR BOARD]
CN702
R703
R705
B C E
Q701
R704
CN701
1-658-575-
13,22 (13,22)
09
E MAIN BOARD CN203 (Page 47)

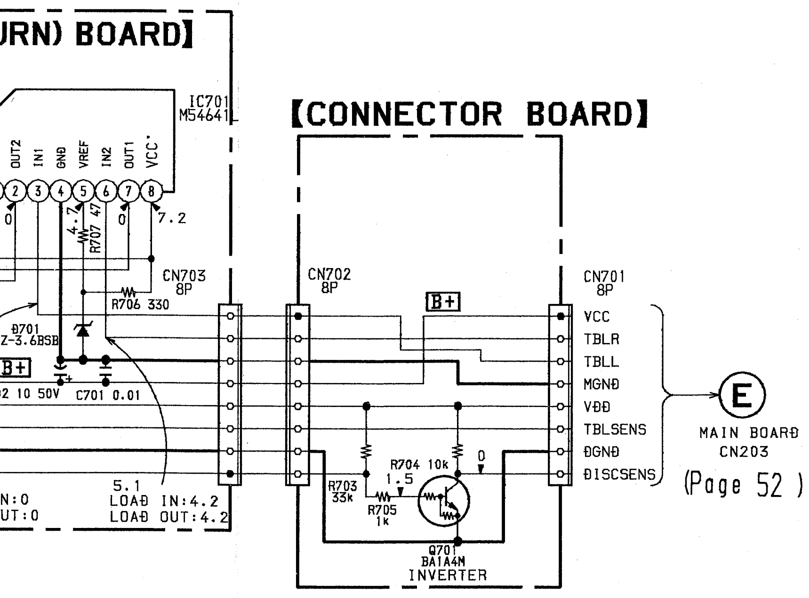
Note:

- ⚬—— : parts extracted from the component side.
- ▨ : Pattern from the side which enable seeing.

6-10. SCHEMATIC DIAGRAM — CD MOTOR SECTION —


1
2
3
4
5
6
A
B
C
D
E
F
G
H
S811 ROTARY ENCODER BU, TRAY ADDRESS DET
CN802 4P
[MOTOR (SLIDE) BOARD]
IC801 MOTOR DRIVER
IC801 BA6286N
GND
RIN
VREF
OUT2
RNF
GND
OUT1
VM
VCC
FIN
5.1 LOAD IN:0
5.4
0
7.2
5.1 LOAD OUT:0
JW803
S801 OPEN/CLOSE DET
D805 1N4148
R801 47
D801 UZ-5.6BSC
D804 1N4148
B+
C801 0.01
C805 10 50V
C804 0.01
M801 SLIDE MOTOR
[SENSOR BOARD]
IC703 DISC SENSOR
IC702 TABLE SENSOR
B+
R702 150
IC703 GP2S28
R701 820
IC702 RPI-1391
CN705 4P
[MOTOR (TURN) BOARD]
TURN MOTOR M701
IC701 M54641L
VCC
OUT2
IN1
GND
VREF
IN2
OUT1
VCC
C705 0.01
7.2
0
4.2
R707 47
CN703 8P
IC701 MOTOR DRIVER
CN704 4P
D701 UZ-3.6BSB
B+
R706 330
C702 10 50V
C701 0.01
5.1 LOAD IN:0 LOAD OUT:0
5.1 LOAD IN:4.2 LOAD OUT:4.2
[CO
CN702 8P
R703 33k
09


5
6
7
8
9
10
11
12
IC701 M54641L
VCC
REG
INPUT AMP.
CONTROL
POWER AMP.
REFERENCE
OUT2
OUT1
IN1
IN2
GND
IDE) BOARD]
S801 OPEN/CLOSE DET
CN801 9P
OPEN
E1
E2
DGND
E3
LOADIN
LOADOUT
MGND
VCC
F
MAIN BOARD CN202
(Page 52)
IC801 BA6286N
GND
RIN
VREF
OUT2
RNF
GND
OUT1
VM
VCC
FIN
POWER SAVE
TSD
CONTROL LOGIC

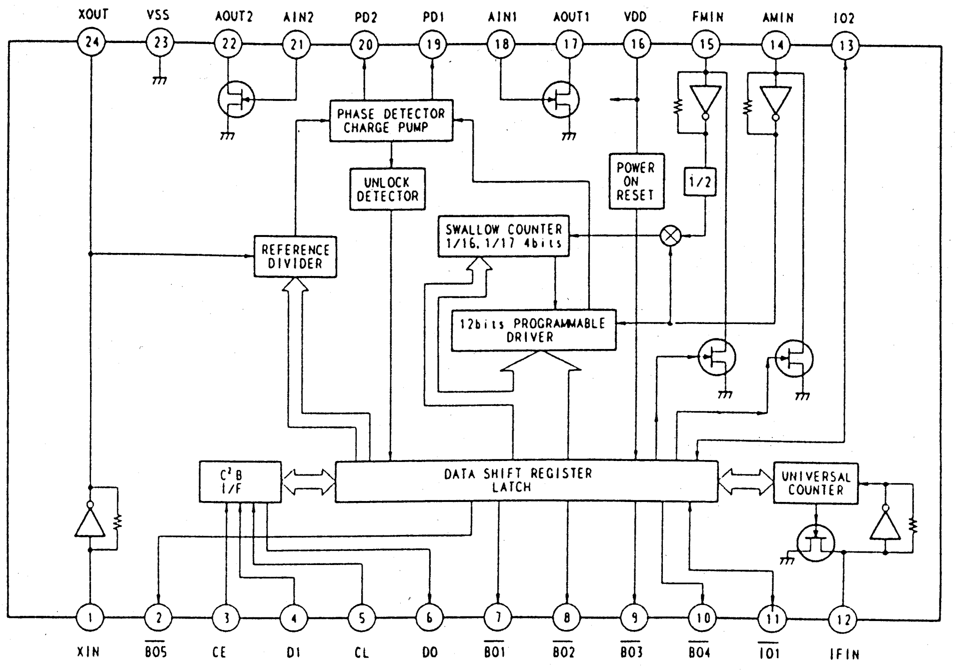

URN) BOARD]
IC701 M54641L
OUT2
IN1
GND
VREF
IN2
OUT1
VCC
7.2
CN703 8P
R706 330
D701 Z-3.6BSB
B+
C701 0.01
5.1
LOAD IN:4.2
LOAD OUT:4.2
[CONNECTOR BOARD]
CN702 8P
CN701 8P
VCC
TBLR
TBLL
MGND
VDD
TBLSENS
DGND
DISCSENS
B+
R704 10k
R703 33k
R705 1k
Q701 BA1A4N INVERTER
E
MAIN BOARD CN203
(Page 52)

NOTE

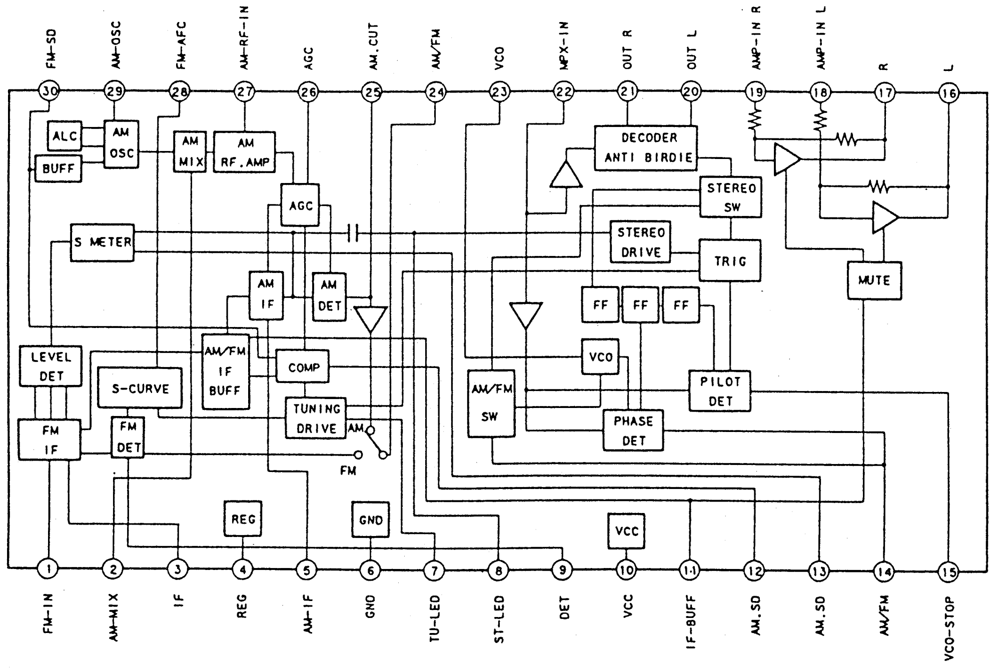
- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- B+ : B+ Line.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark: STOP
- Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.

6-11. IC BLOCK DIAGRAMS — TUNER SECTION —

IC1, 21 LC72130

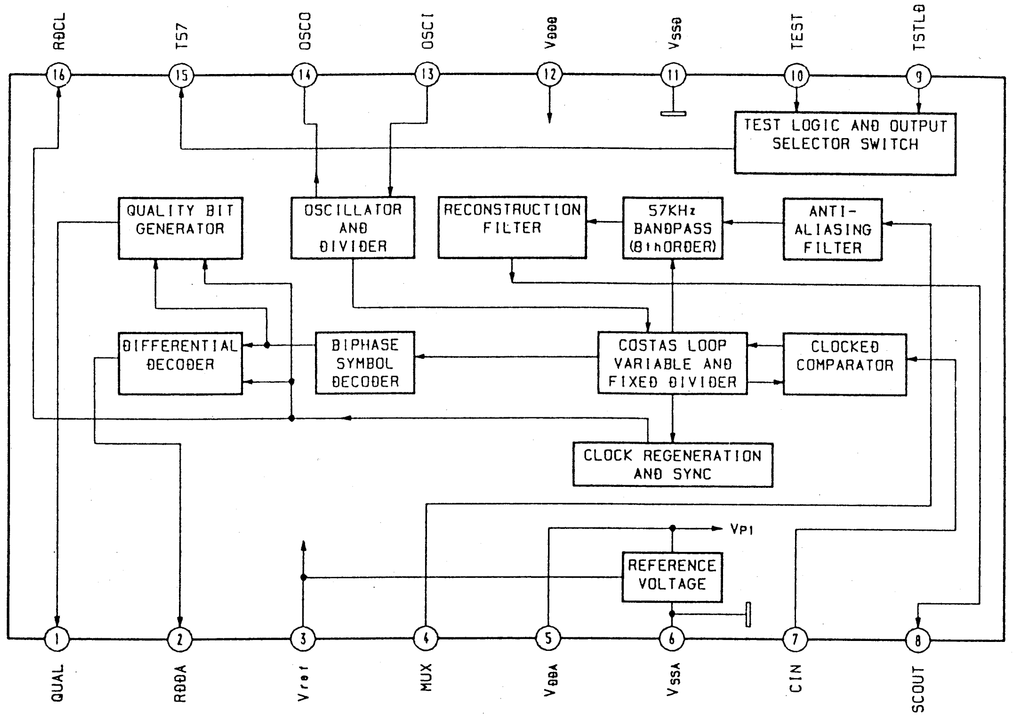

XOUT
VSS
AOUT2
AIN2
PD2
PD1
AIN1
AOUT1
VDD
FMIN
AMIN
IO2
PHASE DETECTOR CHARGE PUMP
UNLOCK DETECTOR
POWER ON RESET
1/2
REFERENCE DIVIDER
SWALLOW COUNTER 1/16, 1/17 4bits
12bits PROGRAMMABLE DRIVER
C²B I/F
DATA SHIFT REGISTER LATCH
UNIVERSAL COUNTER
XIN
BO5
CE
DI
CL
DO
BO1
BO2
BO3
BO4
IO1
IFIN

IC2, 41 LA1835

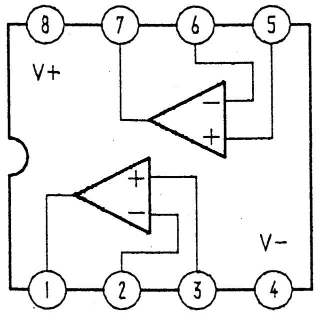

FM-SD
AM-OSC
FM-AFC
AM-RF-IN
AGC
AM.CUT
AM/FM
VCO
MPX-IN
OUT R
OUT L
AMP-IN R
AMP-IN L
R
L
ALC
BUFF
AM OSC
AM MIX
AM RF.AMP
AGC
S METER
AM IF
AM DET
LEVEL DET
S-CURVE
AM/FM IF BUFF
COMP
TUNING DRIVE
AM
FM
FM IF
FM DET
REG
GND
VCC
DECODER ANTI BIRDIE
STEREO SW
STEREO DRIVE
TRIG
FF
VCO
AM/FM SW
PILOT DET
PHASE DET
MUTE
FM-IN
AM-MIX
IF
REG
AM-IF
GND
TU-LED
ST-LED
DET
VCC
IF-BUFF
AM.SD
AM.SD
AM/FM
VCO-STOP

• IC Block Diagrams

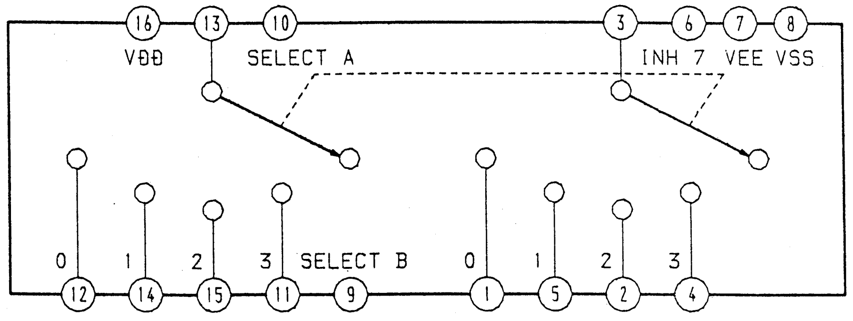
IC250 SAA6579T


RDCL
T57
OSCO
OSCI
VDD
VSSD
TEST
TSTLD
TEST LOGIC AND OUTPUT SELECTOR SWITCH
QUALITY BIT GENERATOR
OSCILLATOR AND DIVIDER
RECONSTRUCTION FILTER
57KHz BANDPASS (8thORDER)
ANTI-ALIASING FILTER
DIFFERENTIAL DECODER
BIPHASE SYMBOL DECODER
COSTAS LOOP VARIABLE AND FIXED DIVIDER
CLOCKED COMPARATOR
CLOCK REGENERATION AND SYNC
REFERENCE VOLTAGE
VPI
QUAL
RDDA
Vref
MUX
VDDA
VSSA
CIN
SCOUT
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16

IC251 RC4558P


8
7
6
5
V+
V-
1
2
3
4

IC802 MC14052BCP

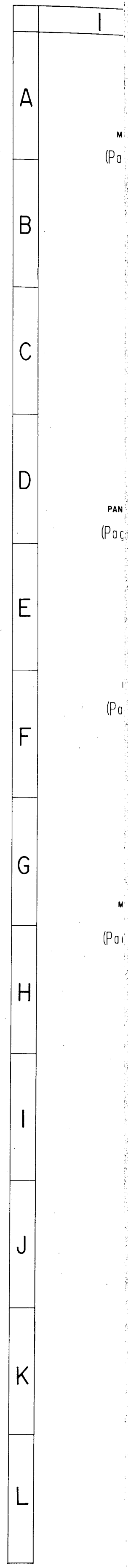

16
13
10
3
6
7
8
VDD
SELECT A
INH 7 VEE VSS
0
1
2
3
SELECT B
12
14
15
11
9
1
5
2
4

• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D201	E-7	IC1001	H-6
D202	E-7	IC1002	H-7
D251	C-12	IC1003	I-6
D401	C-5	IC1004	I-8
D701	E-4	IC1101	I-15
D702	D-4	IC1102	H-15
D703	D-3	IC1103	F-15
D704	D-3	IC1104	E-12
D705	D-3		
D706	E-4	Q301	B-9
D707	E-4	Q351	B-8
D708	D-9	Q401	B-4
D901	J-10	Q402	C-9
D902	J-10	Q403	C-4
D1001	K-7	Q406	C-4
D1002	K-8	Q407	C-4
D1003	K-6	Q408	B-2
D1007	H-6	Q409	C-2
D1008	K-9	Q410	C-4
D1009	I-5	Q411	B-2
D1010	I-7	Q412	C-4
D1011	J-4	Q701	E-5
D1012	J-5	Q820	H-9
D1013	K-4	Q821	D-15
D1014	K-5	Q822	D-15
D1015	J-4	Q823	D-15
D1016	J-5	Q824	D-14
D1017	I-5	Q830	L-16
D1018	H-5	Q901	J-12
D1019	J-3	Q902	J-12
		Q951	H-11
IC201	A-16	Q952	H-10
IC250	B-12	Q953	K-11
IC251	B-13	Q954	L-12
IC401	B-6	Q1001	I-4
IC402	A-3	Q1002	I-4
IC701	D-6	Q1003	J-9
IC702	D-4	Q1006	J-5
IC802	B-15	Q1051	K-13
IC805	L-14	Q1052	K-12
IC901	I-11	Q1101	D-11
IC902	L-14	Q1102	D-11

Note:
- o—— : parts extracted from the component side.
- ■ : parts mounted on the conductor side.
- Δ : Internal component.
- ▨ : Pattern from the side which enable seeing.
- Abbreviation
  CND : Canadian model.
  G : German model.
  IT : Italian model.
  EA : Saudi Arabia model.
  HK : Hong Kong model.
  SP : Singapore model.
  MY : Malaysia model.
  AUS : Australian model.
  AR : Argentine model.
  TH : Thailand model.
  IA : Indonesian model.
  E2 : Without SW tuner model.
  E3 : With SW tuner model.

6-12. PRI
• Se
• Se


1
A
B
C
D
E
F
G
H
I
J
K
L

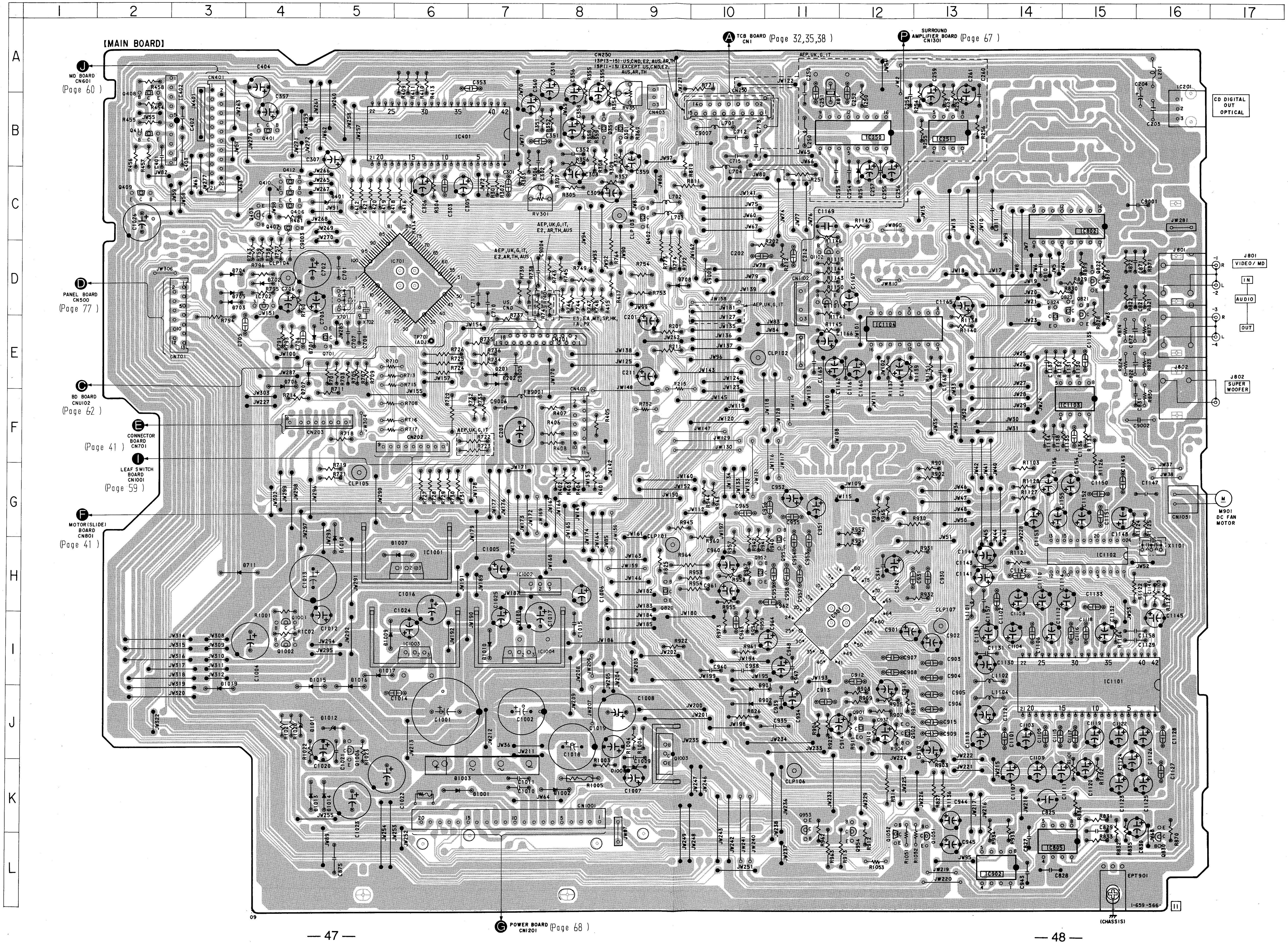
6-12. PRINTED WIRING BOARD — MAIN SECTION —

- See page 18 for Circuit Boards Location.
- See page 54 for Schematic Diagram. (MAIN BOARD (2/2))

Location
H-6
H-7
I-6
I-8
I-15
H-15
F-15
E-12
B-9
B-8
B-4
C-9
C-4
C-4
D-4
B-2
C-2
C-4
B-2
C-4
E-5
H-9
D-15
D-15
D-15
D-14
L-16
J-12
J-12
H-11
H-10
K-11
L-12
I-4
I-4
J-9
J-5
K-13
K-12
D-11
D-11

side.
e.

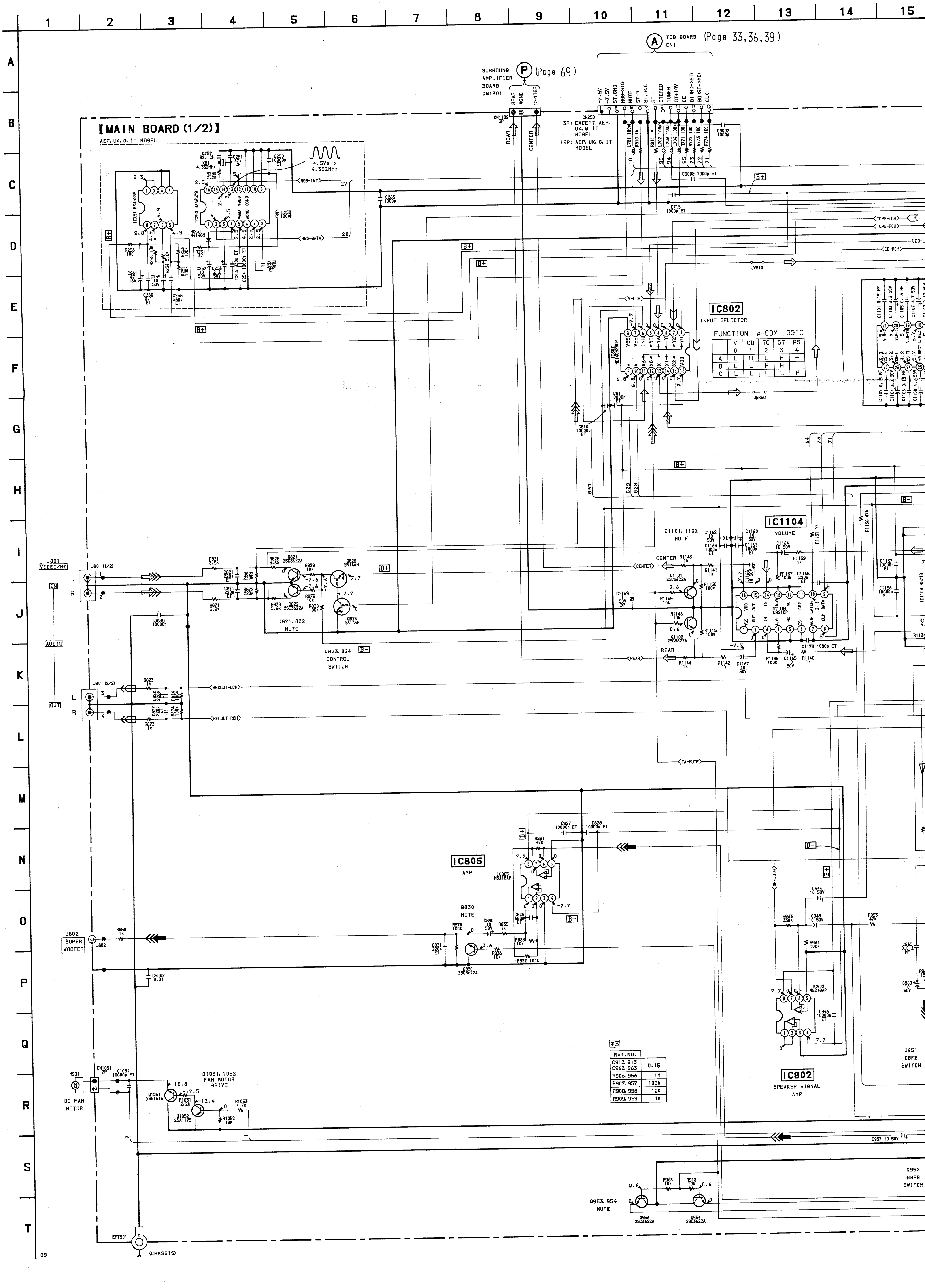
seeing.



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
A
B
C
D
E
F
G
H
I
J
K
L
[MAIN BOARD]
J MD BOARD CN601 (Page 60)
D PANEL BOARD CN500 (Page 77)
C BD BOARD CN102 (Page 62)
E CONNECTOR BOARD CN701 (Page 41)
I LEAF SWITCH BOARD CN1001 (Page 59)
F MOTOR(SLIDE) BOARD CN801 (Page 41)
A TCB BOARD CN1 (Page 32,35,38)
P SURROUND AMPLIFIER BOARD CN1301 (Page 67)
G POWER BOARD CN1201 (Page 68)
CN250 13P(13-15): US,CND,E2,AUS,AR,TH 15P(1-15): EXCEPT US,CND,E2,AUS,AR,TH
AEP,UK,G,IT
AEP,UK,G,IT, E2,AR,TH,AUS
US, CND
E3,EA,MY,SP,HK, IA,PX
IC401
IC701
IC250
IC251
IC201
IC801
IC1104
IC1103
IC1102
IC1101
IC1001
IC1002
IC1003
IC1004
IC901
IC902
IC805
RV301
TP701 (ADJ)
CD DIGITAL OUT OPTICAL
J801 VIDEO/MD IN AUDIO OUT
J802 SUPER WOOFER
M901 DC FAN MOTOR
CN1051
EPT901
(CHASSIS)
1-659-566-11
09

6-13. SCHEMATIC DIAGRAM — MAIN SECTION —

• See page 82 for IC Pin Function. (IC701)

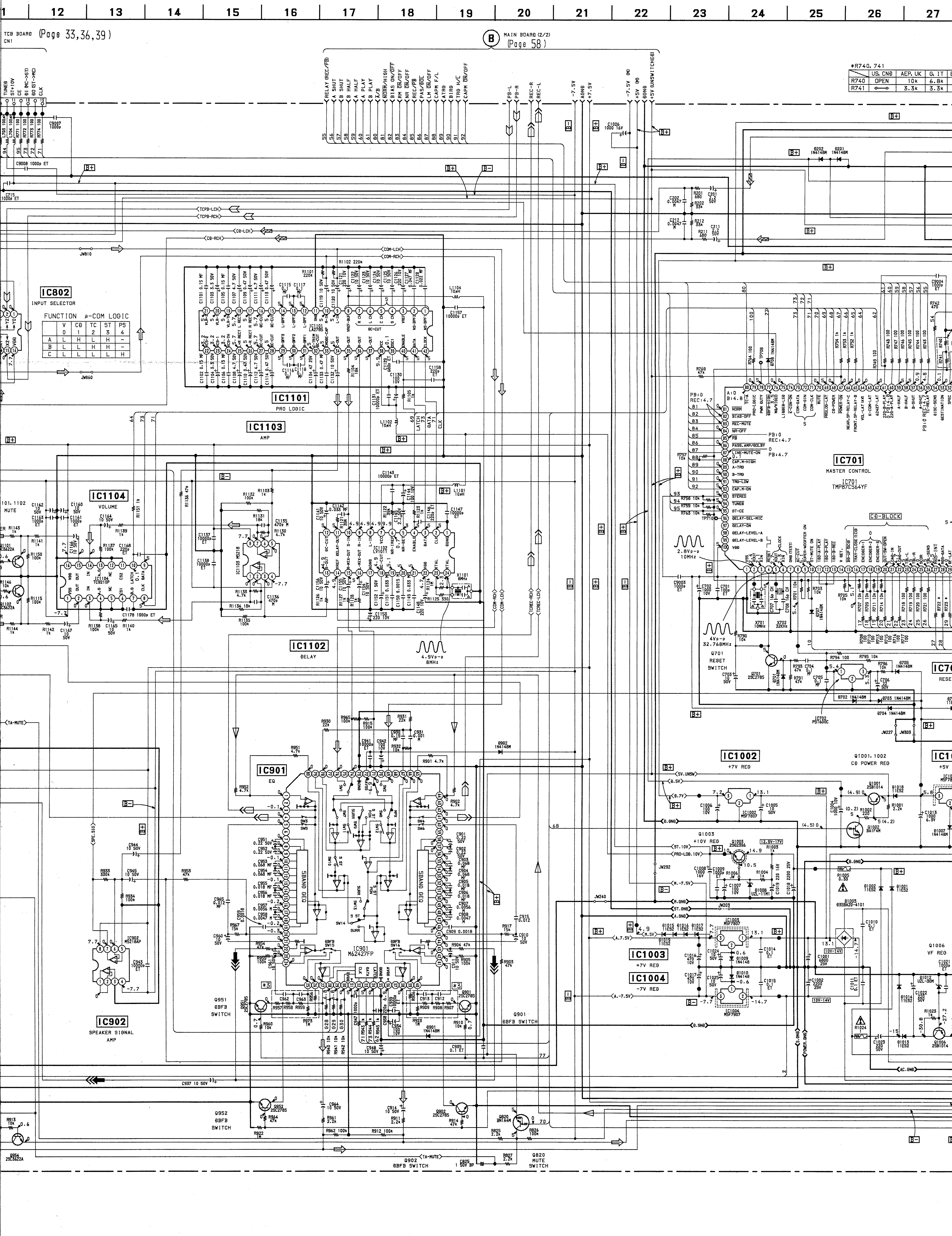

A TCB BOARD CN1 (Page 33,36,39)
SURROUND AMPLIFIER BOARD CN1301 P (Page 69)
CN1102 3P
REAR
AGND
CENTER
CN250
13P: EXCEPT AEP, UK, G, IT MODEL
15P: AEP, UK, G, IT MODEL
-7.5V
+7.5V
ST.GND
RDS-SIG
MUTE
ST-R
ST.GND
ST-L
STEREO
TUNED
ST+10V
CE
DI (MC->ST)
DO (ST->MC)
CLK
【MAIN BOARD (1/2)】
AEP, UK, G, IT MODEL
IC251 RC4558P
IC250 SAA6579
X801 4.332MHz
4.5Vp-p 4.332MHz
L250 100μH
D251 1N4148M
RDS-INT
RDS-DATA
IC802
INPUT SELECTOR
IC802 MC14052BCP
V-LCH
JW810
JW860
IC1104
VOLUME
IC1104 TC9210P
Q1101, 1102 MUTE
Q1101 2SC3622A
Q1102 2SC3622A
CENTER
REAR
TCPB-LCH
TCPB-RCH
CD-LCH
CD-RCH
J801 VIDEO/MD
IN
AUDIO
OUT
J801 (1/2)
J801 (2/2)
Q821, 822 MUTE
Q821 2SC3622A
Q822 2SC3622A
Q823 DN1A4M
Q824 DA1A4M
Q823, 824 CONTROL SWITCH
RECOUT-LCH
RECOUT-RCH
TA-MUTE
IC805
AMP
IC805 M5218AP
Q830 MUTE
Q830 2SC3622A
J802 SUPER WOOFER
SPE.SIG
IC902
SPEAKER SIGNAL AMP
IC902 M5218AP
Q951 DBFB SWITCH
Q952 DBFB SWITCH
M901 DC FAN MOTOR
CN1051 2P
Q1051, 1052 FAN MOTOR DRIVE
Q1051 2SB1616
Q1052 2SA1175
Q953, 954 MUTE
Q953 2SC3622A
Q954 2SC3622A
EPT901
E
(CHASSIS)
B+
B−

FUNCTION μ-COM LOGIC

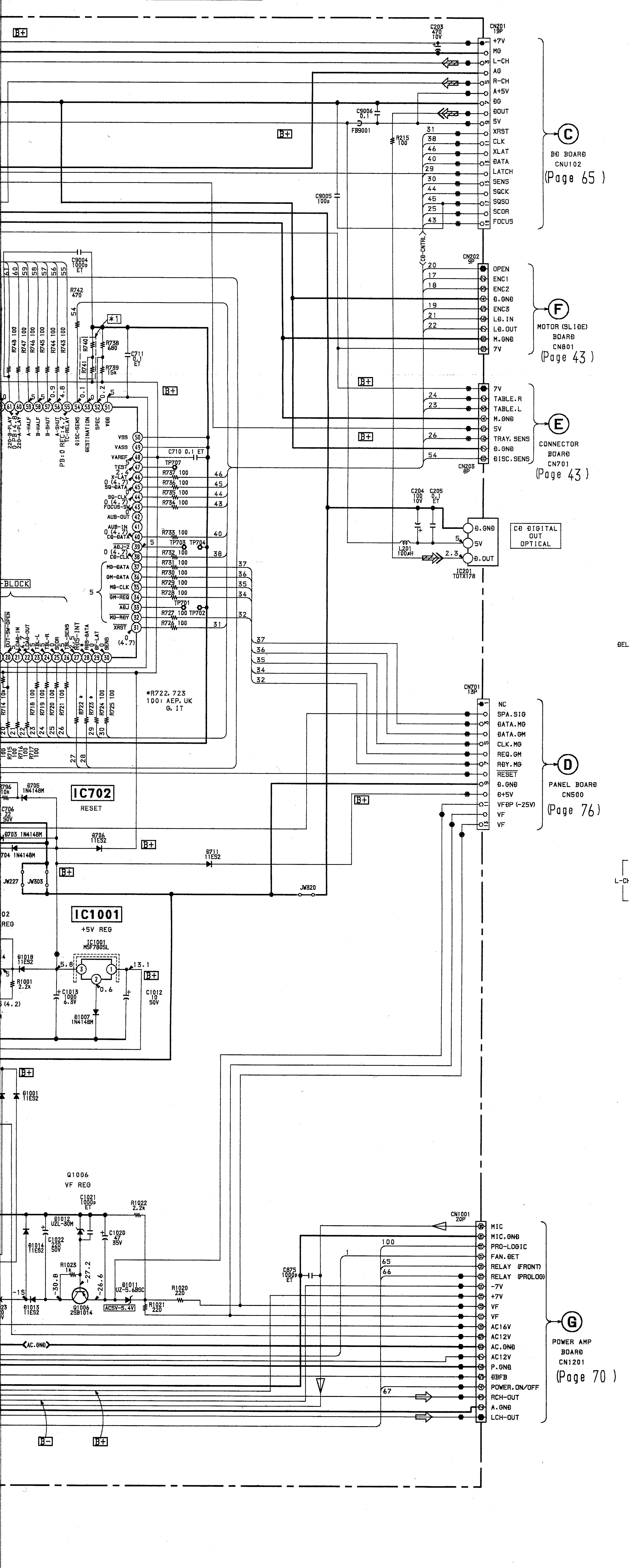
	V 0	CD 1	TC 2	ST 3	PS 4
A	L	H	L	H	–
B	L	L	H	H	–
C	L	L	L	L	H

*3

Ref.NO.	
C912, 913 C962, 963	0.15
R906, 956	1M
R907, 957	100k
R908, 958	10k
R909, 959	1k

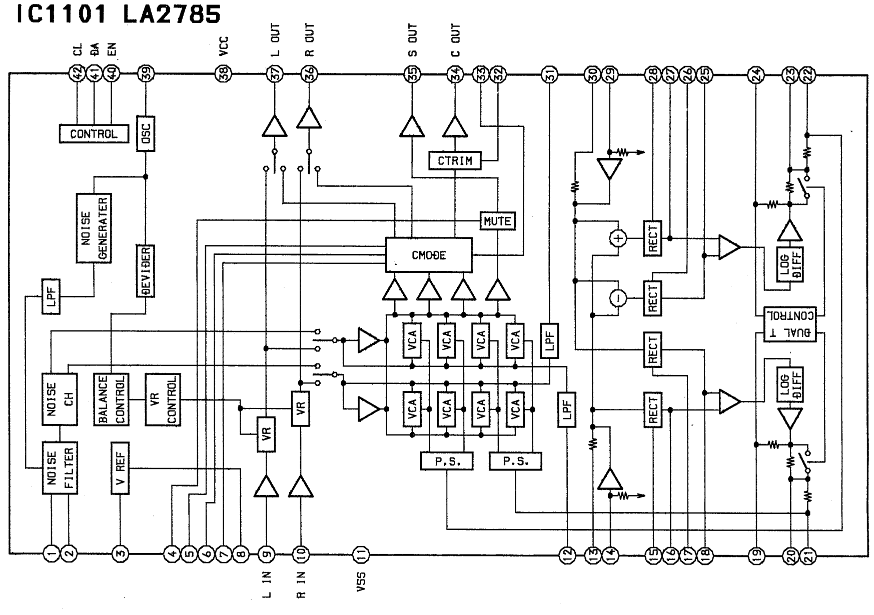

1
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
TCB BOARD (Page 33,36,39)
CN1
B MAIN BOARD (2/2) (Page 58)
*R740, 741
US, CND | AEP, UK | G, IT
R740 OPEN 10k 6.8k
R741 3.3k 3.3k
IC802
INPUT SELECTOR
FUNCTION µ-COM LOGIC
V CD TC ST PS
0 1 2 3 4
A L H L H -
B L L H H -
C L L L L H
IC1101
PRO LOGIC
IC1103
AMP
IC1104
VOLUME
IC1102
DELAY
4.9Vp-p 8MHz
IC901
EQ
IC901 M62427FP
5BAND GEQ
IC902
SPEAKER SIGNAL AMP
Q951 DBFB SWITCH
Q901 DBFB SWITCH
Q952 DBFB SWITCH
Q902 DBFB SWITCH
Q820 MUTE SWITCH
IC701
MASTER CONTROL
IC701 TMP87CS64YF
CD-BLOCK
2.8Vp-p 10MHz
4Vp-p 32.768MHz
Q701 RESET SWITCH
IC702 PST600C
IC1002 +7V REG
Q1001, 1002 CD POWER REG
Q1003 +10V REG
IC1003 +7V REG
IC1004 -7V REG
Q1006 VF REG

CNĐ	AEP, UK	G, IT	E2, AR, TH	E3, EA, MY, SP, HK, IA, PX	AUS
PEN	10k	6.8k	4.7k	—o—o—	22k
—o	3.3k	3.3k	6.8k	OPEN	22k

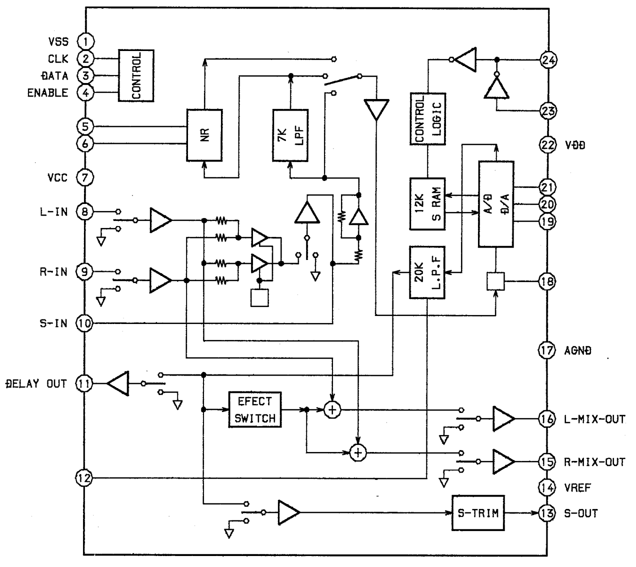

27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
B+
CN201 19P
+7V
MG
L-CH
AG
R-CH
A+5V
ĐG
ĐOUT
5V
XRST
CLK
XLAT
ĐATA
LATCH
SENS
SQCK
SQSO
SCOR
FOCUS
C
BĐ BOARD
CNU102
(Page 65)
CN202 9P
OPEN
ENC1
ENC2
Đ.GNĐ
ENC3
LĐ.IN
LĐ.OUT
M.GNĐ
7V
F
MOTOR (SLIĐE) BOARD
CN801
(Page 43)
7V
TABLE.R
TABLE.L
M.GNĐ
5V
TRAY.SENS
Đ.GNĐ
ĐISC.SENS
CN205 8P
E
CONNECTOR BOARD
CN701
(Page 43)
Đ.GNĐ
5V
Đ.OUT
CĐ ĐIGITAL OUT OPTICAL
IC201 TOTX178
L201 100μH
CN701 18P
NC
SPA.SIG
ĐATA.MG
ĐATA.GM
CLK.MG
REQ.GM
RĐY.MG
RESET
Đ.GNĐ
Đ+5V
VFĐP (-25V)
VF
VF
D
PANEL BOARĐ
CN500
(Page 76)
IC702
RESET
IC1001
+5V REG
IC1001 MSF7805L
Q1006
VF REG
Q1006 2SB1014
*R722, 723
100: AEP, UK
G, IT
CN1001 20P
MIC
MIC.GNĐ
PRO-LOGIC
FAN.ĐET
RELAY (FRONT)
RELAY (PROLOGI)
-7V
+7V
VF
VF
AC16V
AC12V
AC.GNĐ
AC12V
P.GNĐ
ĐBFB
POWER.ON/OFF
RCH-OUT
A.GNĐ
LCH-OUT
G
POWER AMP BOARĐ
CN1201
(Page 70)
B-
B+

· IC Block Diagrams

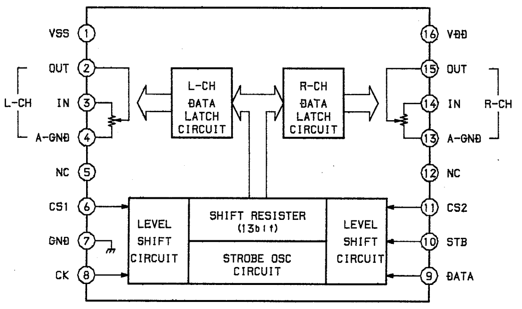
IC1101 LA2785


CL
ĐA
EN
VCC
L OUT
R OUT
S OUT
C OUT
CONTROL
OSC
NOISE GENERATER
ĐEVIĐER
LPF
NOISE CH
BALANCE CONTROL
VR CONTROL
NOISE FILTER
V REF
VR
VR
CTRIM
MUTE
CMOĐE
VCA
LPF
RECT
LOG ĐIFF
ĐUAL T CONTROL
P.S.
L IN
R IN
VSS

IC1202 LV1011


VSS
CLK
ĐATA
ENABLE
CONTROL
NR
7K LPF
CONTROL LOGIC
VĐĐ
VCC
L-IN
R-IN
S-IN
12K S RAM
A/Đ Đ/A
20K L.P.F
AGNĐ
ĐELAY OUT
EFECT SWITCH
L-MIX-OUT
R-MIX-OUT
VREF
S-TRIM
S-OUT

IC1104 TC9210P


VSS
OUT
L-CH IN
A-GNĐ
NC
CS1
GNĐ
CK
L-CH ĐATA LATCH CIRCUIT
R-CH ĐATA LATCH CIRCUIT
LEVEL SHIFT CIRCUIT
SHIFT RESISTER (13bit)
STROBE OSC CIRCUIT
VĐĐ
OUT
IN R-CH
A-GNĐ
NC
CS2
STB
ĐATA

NOTE

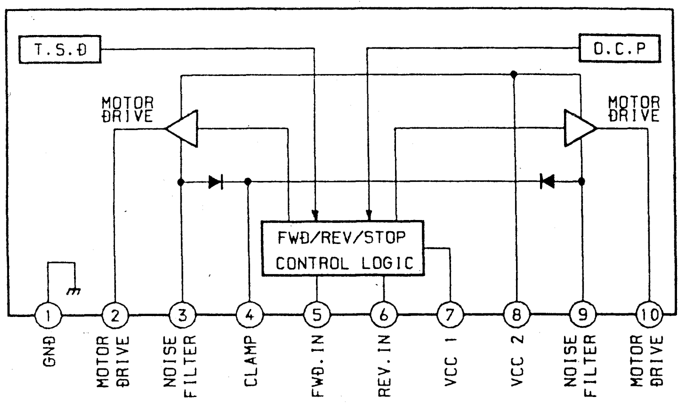
- All capacitors are in μF unless otherwise noted.pF:μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- △ :internal component.
- ─▭─ :fusible resistor.
- ▭ :panel designation.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Note: Les composants identifiès par une marque ⚠ sont critiques pour la sècuritè. Ne les remplacer que par une pièce portant le numèro spècifiè.

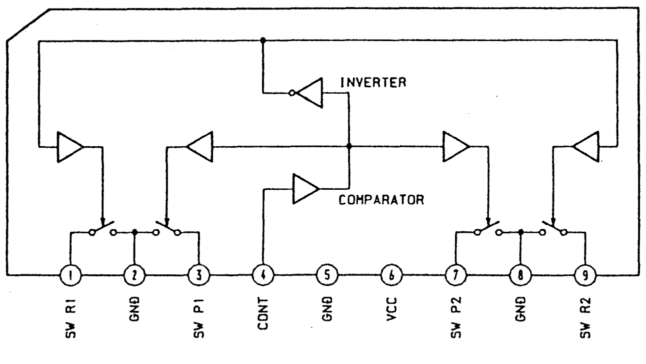
- B+ :B+ Line.
- B- :B- Line.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark:FM
  ( ) :CĐ PLAY
  * :can not be measured.
- Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Abbreviation
  CNĐ:Canadian model.
  G :German model.
  IT :Italian model.
  EA :Saudi Arabia model.
  MY :Malaysia model.
  HK :Hong Kong model.
  SP :Singapore model.
  AR :Argentine model.
  AUS:Australian model.
  TH :Thailand model.
  IA :Indonesian model.
  E2 :Without SW tuner model.
  E3 :With SW tuner model.
- Signal path.
  ⇨ :FM
  ⇨》 :VIĐEO WOOFER
  ➡》 :SUPER WOOFER
  ▷ :PB
  ▷》 :REC
  ⇨ :CĐ
  ⇨》 :digital out
  ⇨》》 :PHONO
  ▷ :MIC

- **IC Block Diagrams**

IC402 LB1641

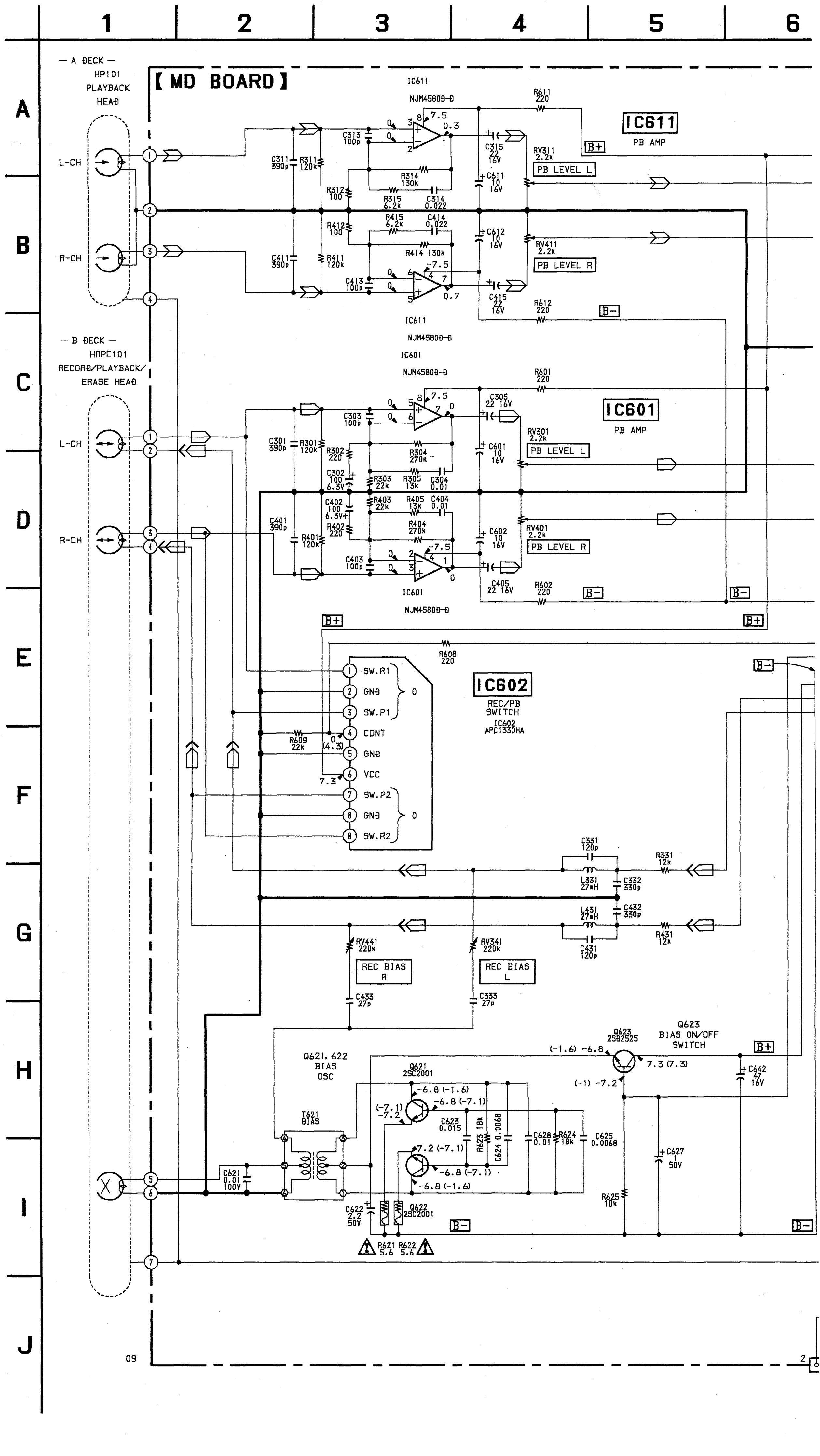

T.S.D
O.C.P
MOTOR DRIVE
MOTOR DRIVE
FWD/REV/STOP CONTROL LOGIC
GND
MOTOR DRIVE
NOISE FILTER
CLAMP
FWD. IN
REV. IN
VCC 1
VCC 2
NOISE FILTER
MOTOR DRIVE

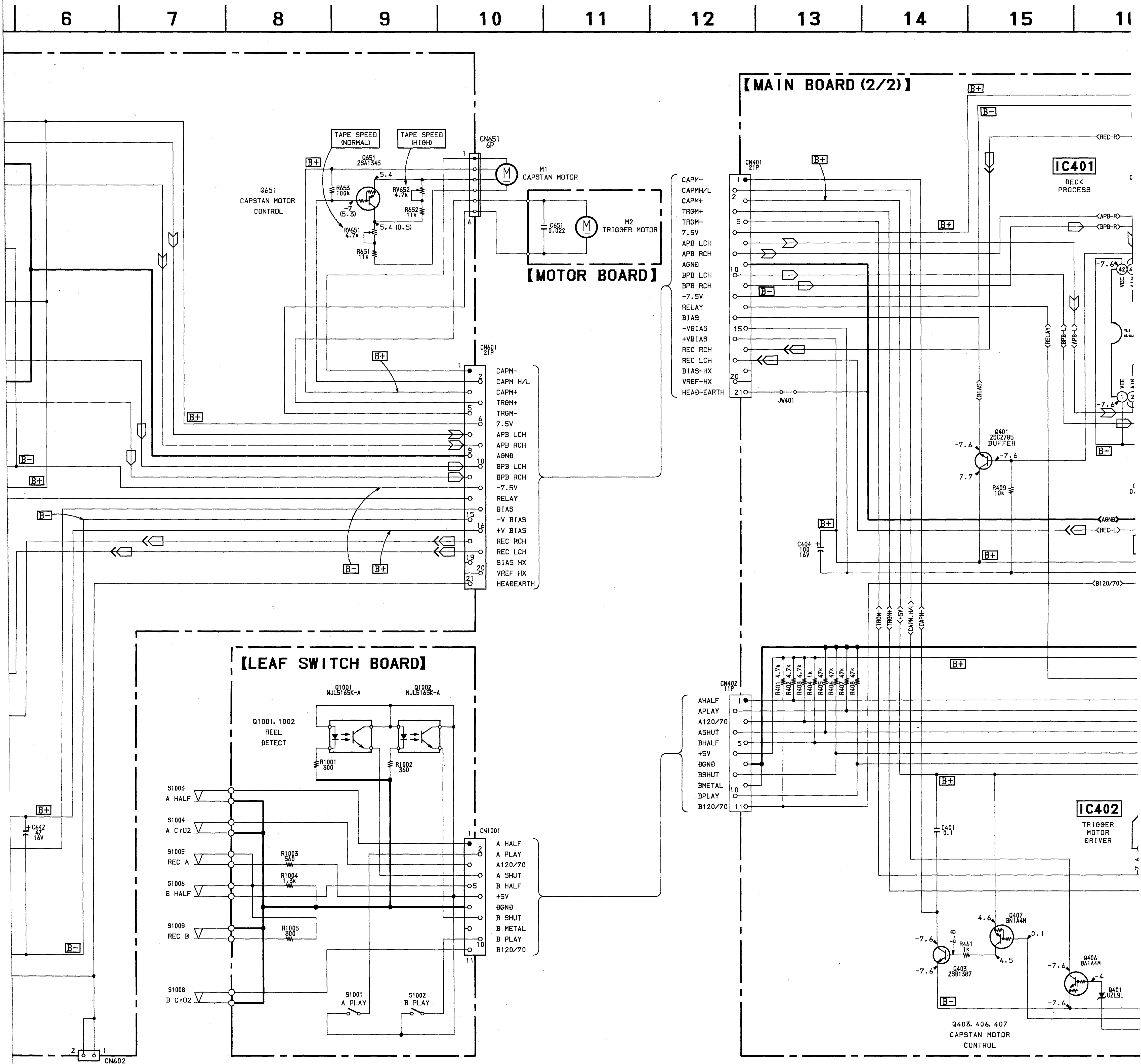
IC602 µPC1330HA


INVERTER
COMPARATOR
SW R1
GND
SW P1
CONT
GND
VCC
SW P2
GND
SW R2

6-14. SCHEMATIC DIAGRAM — DECK SECTION —

• See page 47 for Printed Wiring Board. (MAIN BOARD)


1
2
3
4
5
6
A
B
C
D
E
F
G
H
I
J
— A DECK —
HP101 PLAYBACK HEAD
L-CH
R-CH
— B DECK —
HRPE101 RECORD/PLAYBACK/ERASE HEAD
[MD BOARD]
IC611 NJM4580D-D
IC611 PB AMP
PB LEVEL L
PB LEVEL R
IC601 NJM4580D-D
IC601 PB AMP
IC602 REC/PB SWITCH IC602 µPC1330HA
SW.R1
GND
SW.P1
CONT
GND
VCC
SW.P2
GND
SW.R2
REC BIAS R
REC BIAS L
Q621, 622 BIAS OSC
T621 BIAS
Q621 2SC2001
Q622 2SC2001
Q623 2SD2525
Q623 BIAS ON/OFF SWITCH
09


6
7
8
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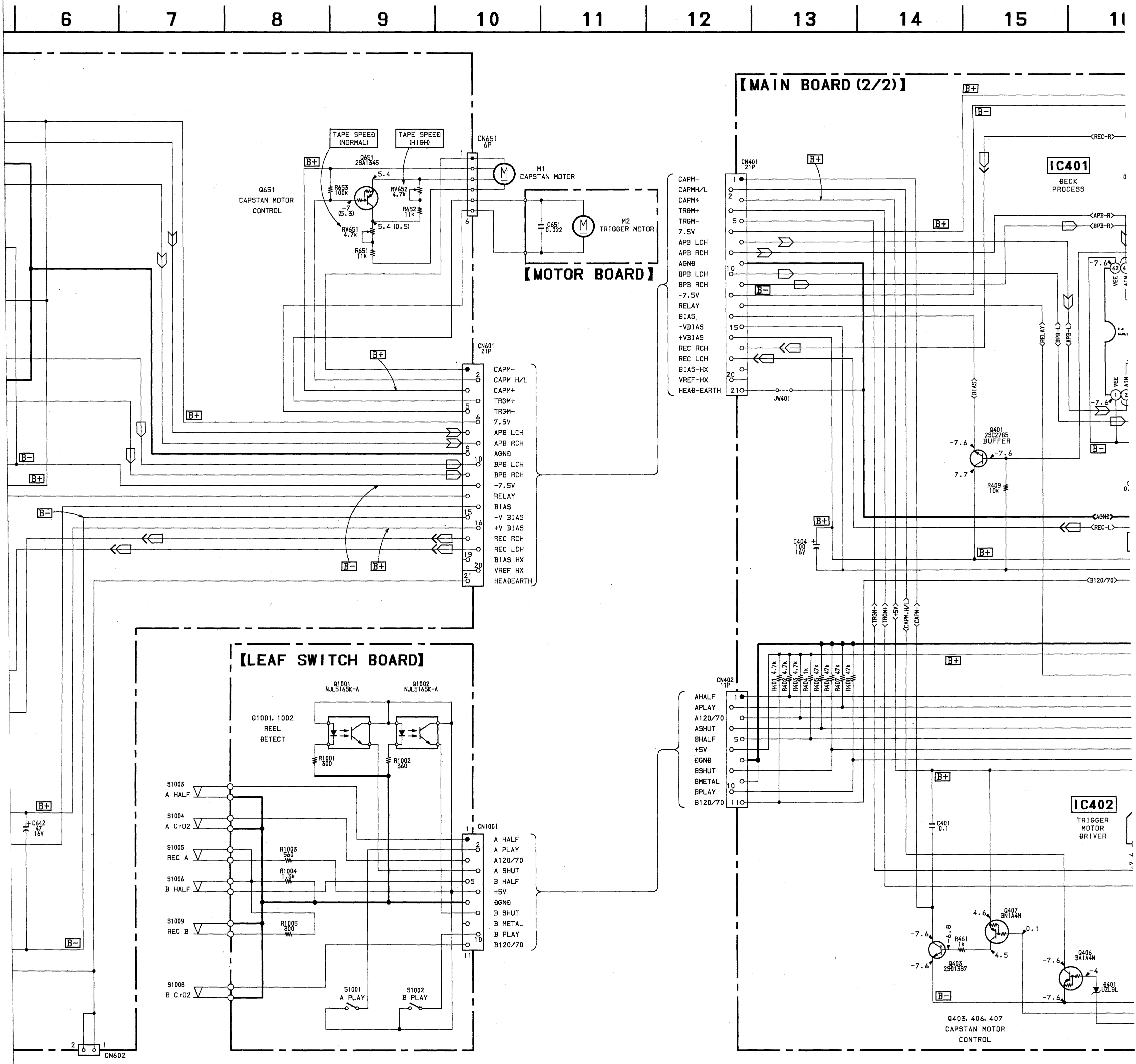
11
12
13
14
15
【MAIN BOARD (2/2)】
【MOTOR BOARD】
【LEAF SWITCH BOARD】
TAPE SPEED (NORMAL)
TAPE SPEED (HIGH)
Q651 2SA1345
Q651 CAPSTAN MOTOR CONTROL
R653 100k
RV652 4.7k
R652 11k
RV651 4.7k
R651 11k
5.4
-7 (5.3)
5.4 (0.5)
CN651 6P
M1 CAPSTAN MOTOR
C651 0.022
M2 TRIGGER MOTOR
CN601 21P
CAPM-
CAPM H/L
CAPM+
TRGM+
TRGM-
7.5V
APB LCH
APB RCH
AGND
BPB LCH
BPB RCH
-7.5V
RELAY
BIAS
-V BIAS
+V BIAS
REC RCH
REC LCH
BIAS HX
VREF HX
HEADEARTH
CN401 21P
CAPMH/L
-VBIAS
+VBIAS
BIAS-HX
VREF-HX
HEAD-EARTH
JW401
IC401
DECK PROCESS
Q401 2SC2785 BUFFER
R409 10k
C404 100 16V
-7.6
7.7
(REC-R)
(APB-R)
(BPB-R)
(AGND)
(REC-L)
(B120/70)
(RELAY)
(BPB-L)
(APB-L)
(BIAS)
(TRGM-)
(TRGM+)
(+5V)
(CAPM.H/L)
(CAPM-)
CN402 11P
R401 4.7k
R402 4.7k
R403 4.7k
R404 1k
R405 47k
R406 47k
R407 47k
R408 47k
AHALF
APLAY
A120/70
ASHUT
BHALF
+5V
DGND
BSHUT
BMETAL
BPLAY
B120/70
IC402
TRIGGER MOTOR DRIVER
C401 0.1
Q407 BN1A4M
Q403 2SB1387
R461 1k
Q406 BA1A4M
D401 UZL9L
Q403, 406, 407 CAPSTAN MOTOR CONTROL
4.6
-6.8
0.1
4.5
-4
Q1001 NJL5165K-A
Q1002 NJL5165K-A
Q1001, 1002 REEL DETECT
R1001 300
R1002 360
S1003 A HALF
S1004 A CrO2
S1005 REC A
S1006 B HALF
S1009 REC B
S1008 B CrO2
R1003 560
R1004 1.3k
R1005 800
S1001 A PLAY
S1002 B PLAY
CN1001
A HALF
A PLAY
A120/70
A SHUT
B HALF
+5V
DGND
B SHUT
B METAL
B PLAY
B120/70
C642 47 16V
CN602
B+
B-


6
7
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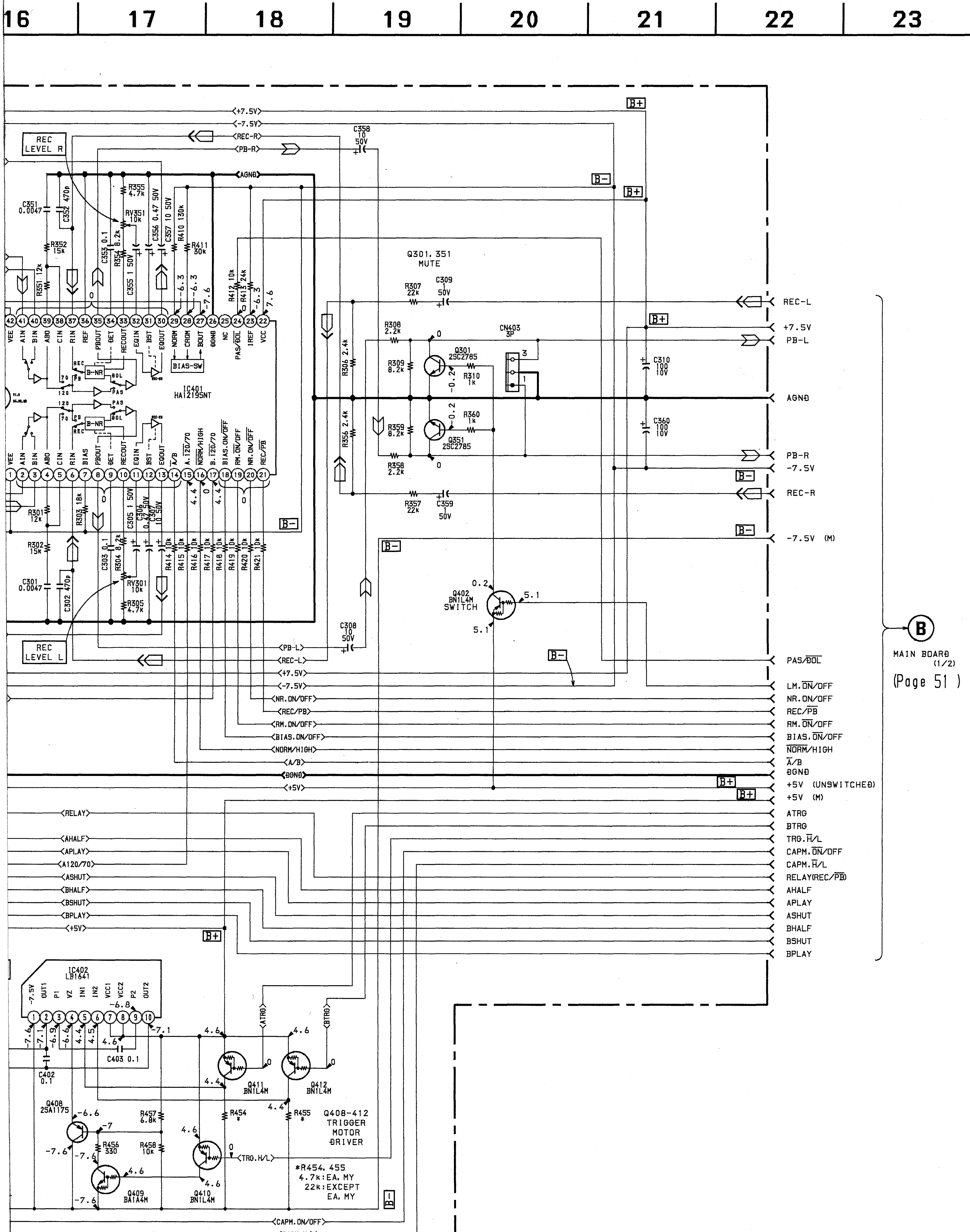
10
11
12
13
14
15
【MAIN BOARD (2/2)】
【MOTOR BOARD】
【LEAF SWITCH BOARD】
TAPE SPEED (NORMAL)
TAPE SPEED (HIGH)
Q651 2SA1345
Q651 CAPSTAN MOTOR CONTROL
R653 100k
RV652 4.7k
R652 11k
RV651 4.7k
R651 11k
5.4
-7 (5.3)
5.4 (0.5)
CN651 6P
M1 CAPSTAN MOTOR
C651 0.022
M2 TRIGGER MOTOR
CN601 21P
CAPM-
CAPM H/L
CAPM+
TRGM+
TRGM-
7.5V
APB LCH
APB RCH
AGND
BPB LCH
BPB RCH
-7.5V
RELAY
BIAS
-V BIAS
+V BIAS
REC RCH
REC LCH
BIAS HX
VREF HX
HEADEARTH
CN401 21P
CAPMH/L
-VBIAS
+VBIAS
BIAS-HX
VREF-HX
HEAD-EARTH
JW401
IC401 DECK PROCESS
<REC-R>
<APB-R>
<BPB-R>
<RELAY>
<BPB-L>
<APB-L>
<BIAS>
<AGND>
<REC-L>
<B120/70>
VEE
AIN
Q401 2SC2785 BUFFER
-7.6
7.7
R409 10k
C404 100 16V
<TRGM->
<TRGM+>
<+5V>
<CAPM.H/L>
<CAPM->
R401 4.7k
R402 4.7k
R403 4.7k
R404 1k
R405 47k
R406 47k
R407 47k
R408 47k
CN402 11P
AHALF
APLAY
A120/70
ASHUT
BHALF
+5V
DGND
BSHUT
BMETAL
BPLAY
B120/70
IC402 TRIGGER MOTOR DRIVER
C401 0.1
Q407 BN1A4M
Q403 2SB1387
Q406 BA1A4M
D401 UZL9L
R461 1k
4.6
-6.8
0.1
4.5
-4
Q403, 406, 407 CAPSTAN MOTOR CONTROL
Q1001 NJL5165K-A
Q1002 NJL5165K-A
Q1001, 1002 REEL DETECT
R1001 300
R1002 360
S1003 A HALF
S1004 A CrO2
S1005 REC A
S1006 B HALF
S1009 REC B
S1008 B CrO2
R1003 560
R1004 1.3k
R1005 300
S1001 A PLAY
S1002 B PLAY
CN1001
A HALF
A PLAY
A120/70
A SHUT
B HALF
B SHUT
B METAL
B PLAY
B120/70
C642 47 16V
CN602
B+
B-


16
17
18
19
20
21
22
23
REC LEVEL R
REC LEVEL L
IC401 HA12195NT
B-NR
BOL
PAS
BIAS-SW
RV351 10k
RV301 10k
Q301, 351 MUTE
Q301 2SC2785
Q351 2SC2785
CN403 3P
Q402 BN1L4M SWITCH
C310 100 10V
C360 100 10V
IC402 LB1641
Q408 2SA1175
Q409 BA1A4M
Q410 BN1L4M
Q411 BN1L4M
Q412 BN1L4M
Q408-412 TRIGGER MOTOR DRIVER
*R454, 455 4.7k:EA, MY 22k:EXCEPT EA, MY
B+
B-
REC-L
+7.5V
PB-L
AGND
PB-R
-7.5V
REC-R
-7.5V (M)
PAS/BOL
LM.ON/OFF
NR.ON/OFF
REC/PB
RM.ON/OFF
BIAS.ON/OFF
NORM/HIGH
A/B
BGND
+5V (UNSWITCHED)
+5V (M)
ATRG
BTRG
TRG.H/L
CAPM.ON/OFF
CAPM.H/L
RELAY(REC/PB)
AHALF
APLAY
ASHUT
BHALF
BSHUT
BPLAY
B
MAIN BOARD (1/2)
(Page 51)

NOTE

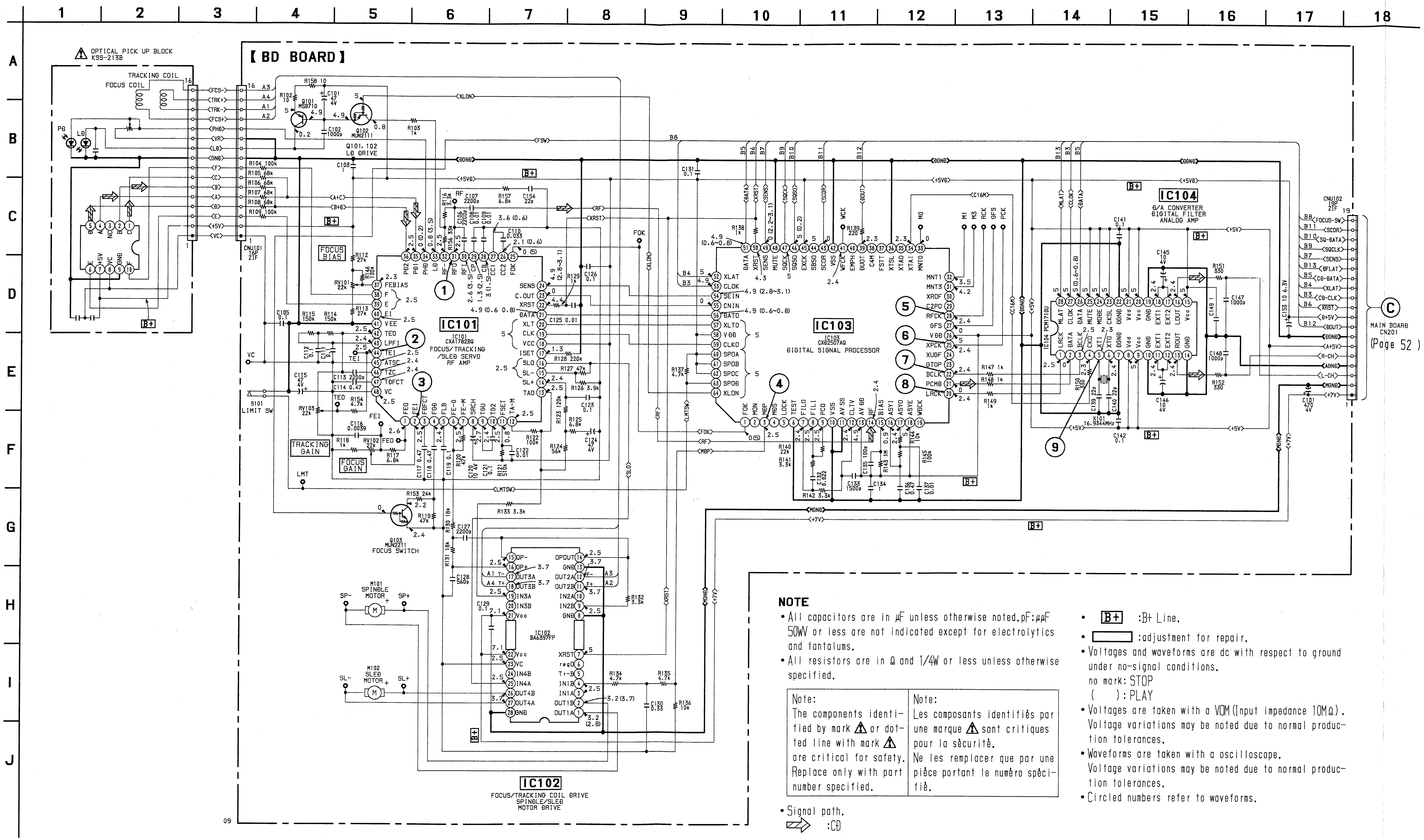
- All capacitors are in μF unless otherwise noted. pF:μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- :fusible resistor.

Note:	Note:
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiès par une marque ⚠ sont critiques pour la sècuritè. Ne les remplacer que par une pièce portant le numèro spècifiè.

- B+ :B+ Line.
- B- :B- Line.
- ▭ :adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark: PLAY
  ( ): REC
- Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Abbreviation
  EA :Saudi Arabia model.
  MY :Malaysia model.
- Signal path.
  ≻ :PB (DECK A)
  ▷ :PB (DECK B)
  ▷≻ :REC (DECK B)

6-17. SCHEMATIC DIAGRAM — CD SECTION —

- See page 85 for IC Block Diagrams.


1
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11
12
13
14
15
16
17
18
A
B
C
D
E
F
G
H
I
J
⚠ OPTICAL PICK UP BLOCK KSS-213B
TRACKING COIL
FOCUS COIL
PD
LD
[BD BOARD]
CN101 16P ZIF
Q101, 102 LD DRIVE
FOCUS BIAS
TRACKING GAIN
FOCUS GAIN
S101 LIMIT SW
LMT
VC
FOK
IC101 CXA1782BQ FOCUS/TRACKING /SLED SERVO RF AMP
Q103 MUN2211 FOCUS SWITCH
M101 SPINDLE MOTOR
SP-
SP+
M102 SLED MOTOR
SL-
SL+
IC102 BA6397FP
IC102 FOCUS/TRACKING COIL DRIVE SPINDLE/SLED MOTOR DRIVE
IC103 CXD2507AQ DIGITAL SIGNAL PROCESSOR
IC104 D/A CONVERTER DIGITAL FILTER ANALOG AMP
IC104 PCM1710U
X101 16.9344MHz
CN102 19P ZIF
MAIN BOARD CN201 (Page 52)
C
B+

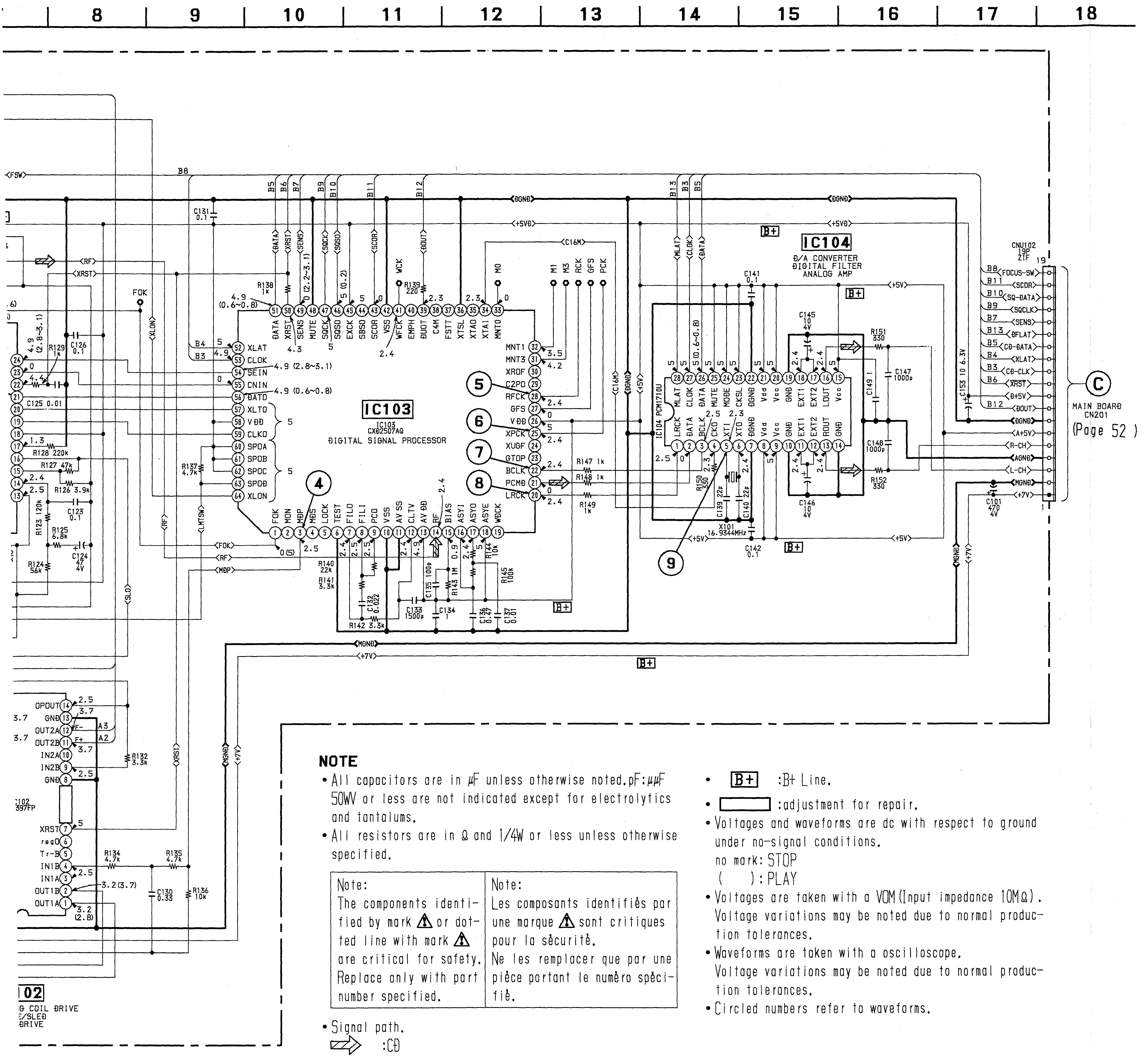
NOTE

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.

Note:	Note:
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- Signal path.
  ⇨ :CD

- B+ :B+ Line.
- ▭ :adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark: STOP
  ( ) : PLAY
- Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.


8
9
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11
12
13
14
15
16
17
18
IC103
CXD2507AQ
DIGITAL SIGNAL PROCESSOR
IC104
D/A CONVERTER
DIGITAL FILTER
ANALOG AMP
IC104 PCM1710U
CNU102
19P
ZIF
MAIN BOARD
CN201
(Page 52)
X101
16.9344MHz
B+
102
G COIL DRIVE
/SLED
DRIVE

NOTE

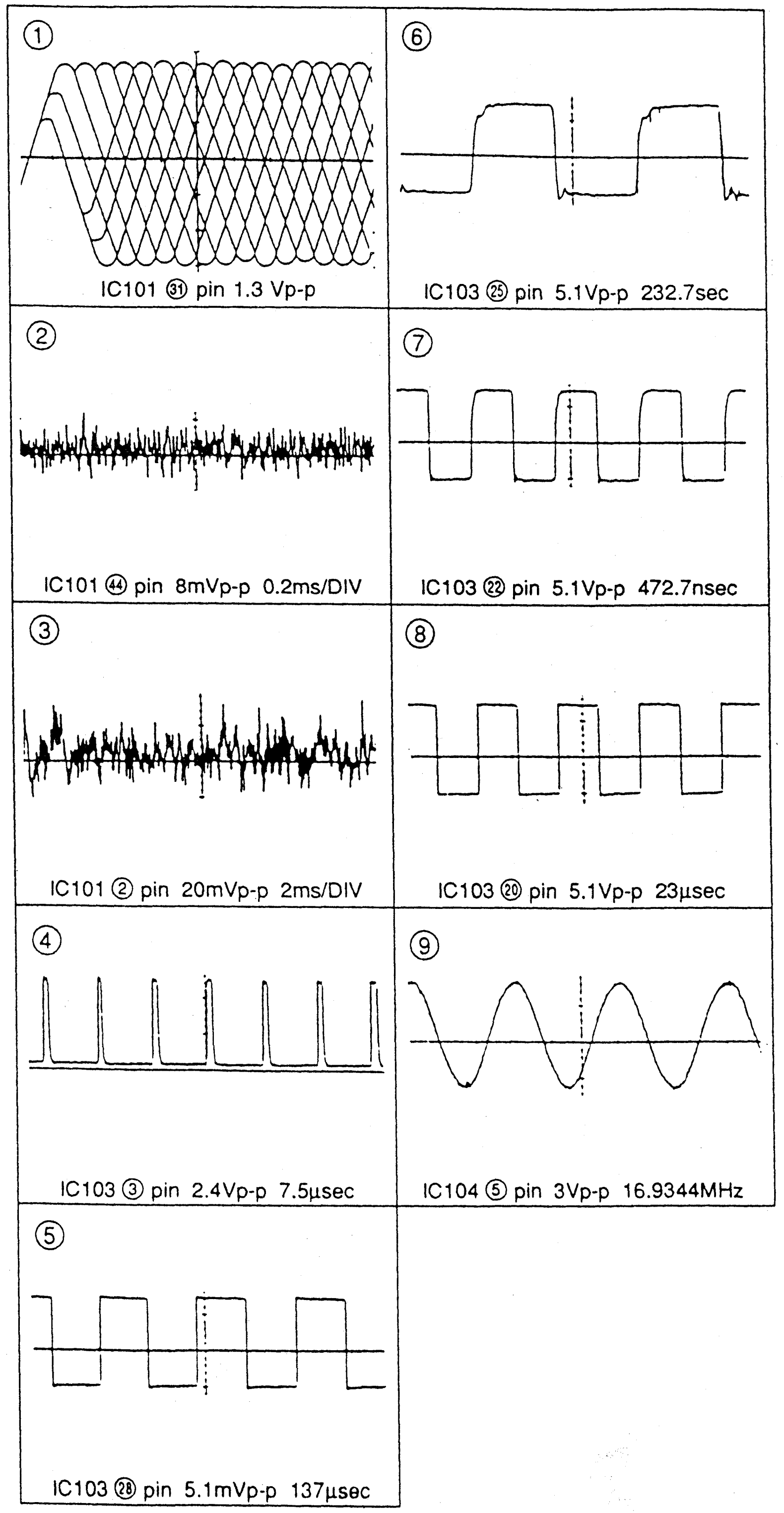
- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.

Note:	Note:
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- Signal path.
  ⇨ :CD

- B+ :B+ Line.
- ▭ :adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark: STOP
  ( ): PLAY
- Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.

- **Waveforms**



① IC101 ㉛ pin 1.3 Vp-p

② IC101 ㊹ pin 8mVp-p 0.2ms/DIV

③ IC101 ② pin 20mVp-p 2ms/DIV

④ IC103 ③ pin 2.4Vp-p 7.5μsec

⑤ IC103 ㉘ pin 5.1mVp-p 137μsec

⑥ IC103 ㉕ pin 5.1Vp-p 232.7sec

⑦ IC103 ㉒ pin 5.1Vp-p 472.7nsec

⑧ IC103 ⑳ pin 5.1Vp-p 23μsec

⑨ IC104 ⑤ pin 3Vp-p 16.9344MHz

6-18. PRINTED WIRING BOARD — POWER SECTION —

• See page 18 for Circuit Boards Location.

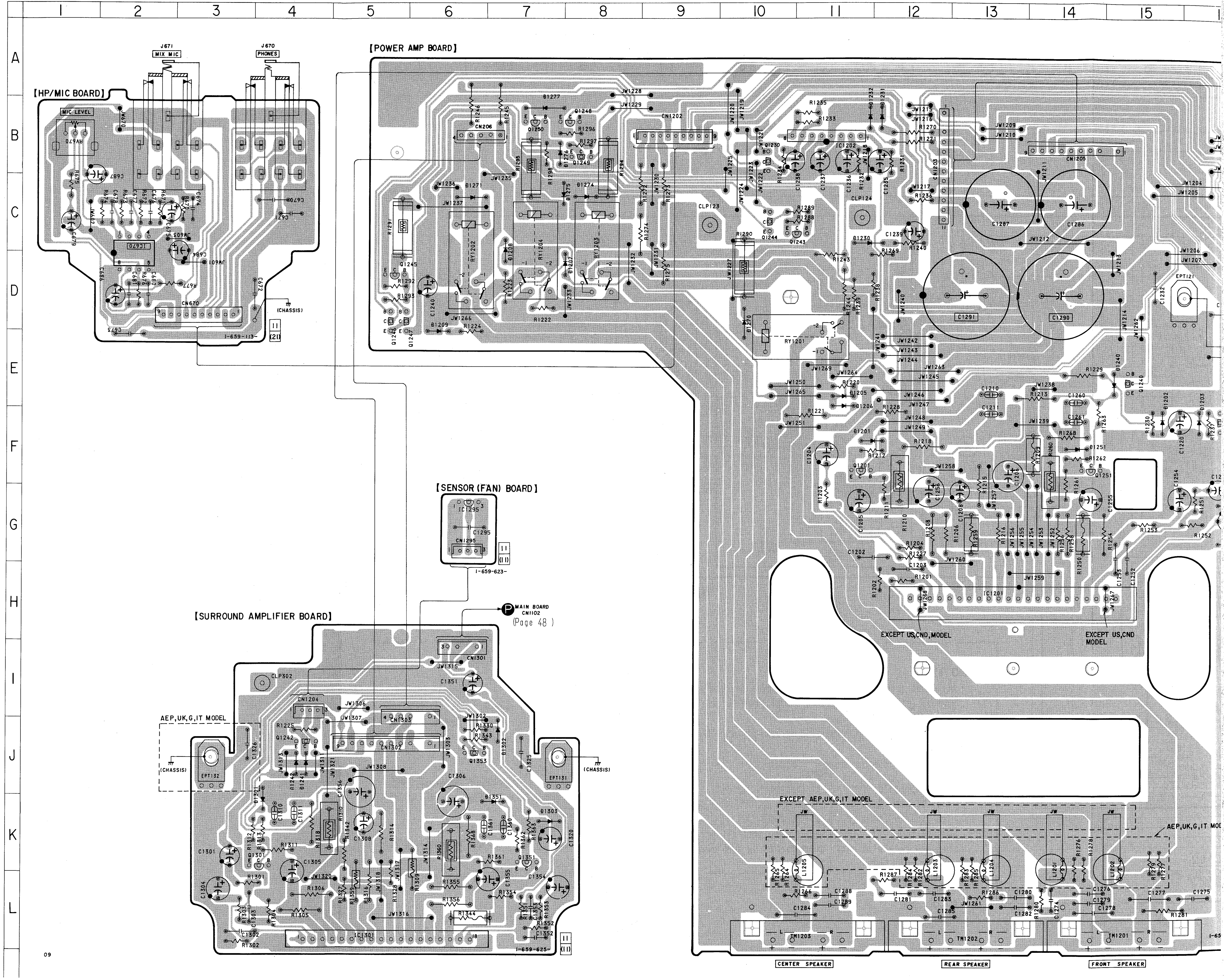
• Semiconductor Location

Ref. No.	Location
D1201	F-11
D1202	E-15
D1203	E-16
D1205	E-11
D1206	E-11
D1207	D-8
D1208	C-7
D1209	D-6
D1230	C-11
D1231	B-12
D1232	B-11
D1240	E-15
D1241	J-4
D1242	J-4
D1251	F-14
D1270	D-10
D1271	C-6
D1274	C-8
D1275	C-7
D1276	B-7
D1277	A-7
D1301	J-4
D1302	J-7
D1303	K-7
D1351	J-7
D1601	D-20
D1602	E-19
IC670	C-2
IC1201	H-13
IC1202	B-11
IC1295	G-6
IC1301	L-5
Q1201	F-11
Q1210	F-16
Q1230	B-10
Q1240	E-15
Q1242	J-4
Q1243	C-10
Q1244	C-10
Q1245	D-5
Q1246	D-5
Q1247	D-5
Q1248	B-8
Q1249	B-8
Q1250	B-7
Q1251	F-14
Q1301	K-4
Q1351	K-7
Q1353	J-6

Note:

- ○—— : parts extracted from the component side.
- ▨ : Pattern from the side which enable seeing.
- Abbreviation

CND : Canadian model.
G : German model.
IT : Italian model.
EA : Saudi Arabia model.
SP : Singapore model.
AR : Argentine model.
HK : Hong Kong model.
TH : Thailand model.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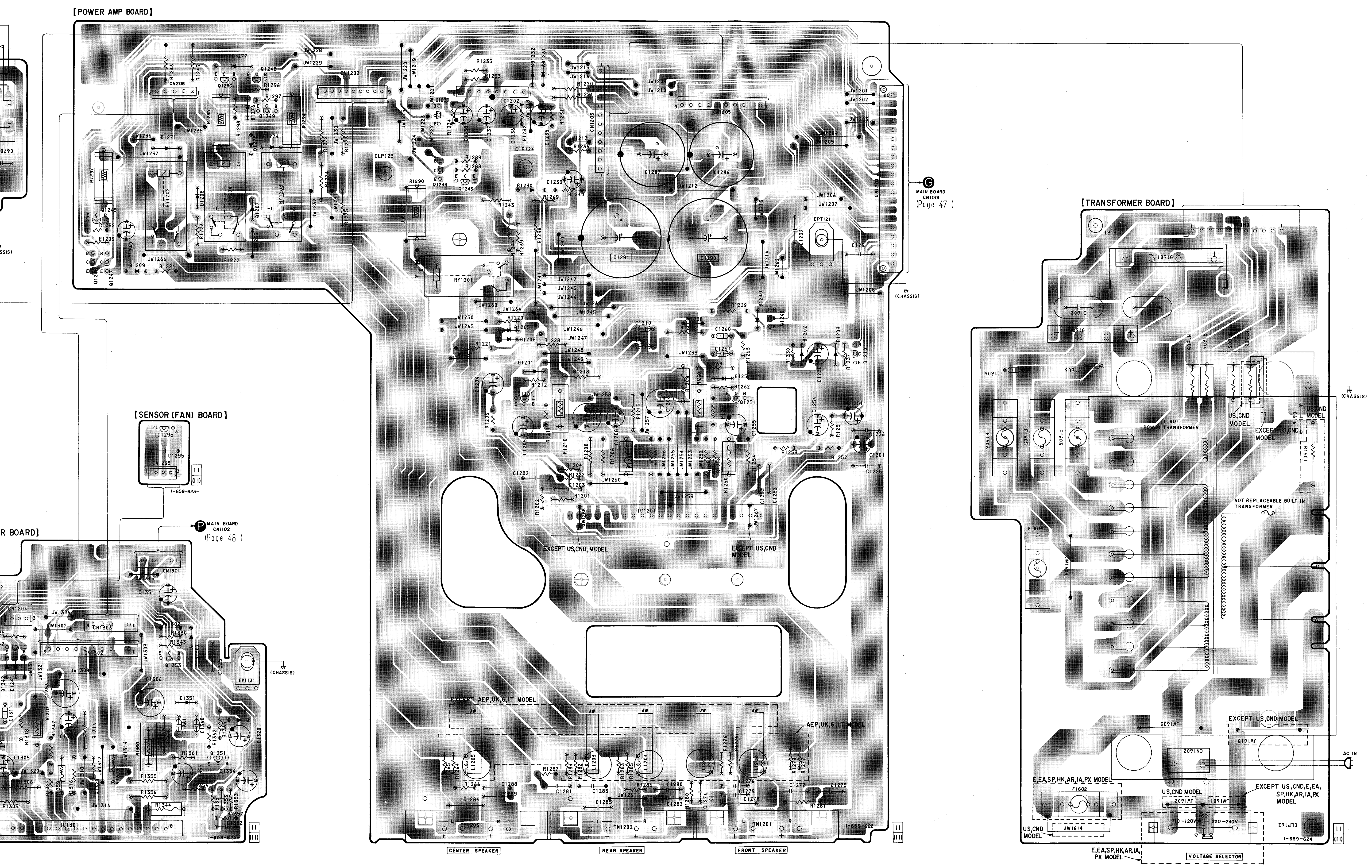
11
12
13
14
15
A
B
C
D
E
F
G
H
I
J
K
L
[HP/MIC BOARD]
J671
MIX MIC
J670
PHONES
MIC LEVEL
IC670
CN670
(CHASSIS)
1-659-113-
[POWER AMP BOARD]
CN206
CN1202
CN1205
RY1202
RY1204
RY1203
RY1201
CLP123
CLP124
IC1202
C1287
C1286
C1291
C1290
EPT121
IC1201
EXCEPT US,CND,MODEL
EXCEPT US,CND MODEL
EXCEPT AEP,UK,G,IT MODEL
AEP,UK,G,IT MODEL
TM1203
TM1202
TM1201
CENTER SPEAKER
REAR SPEAKER
FRONT SPEAKER
[SENSOR (FAN) BOARD]
IC1295
CN1295
1-659-623-
MAIN BOARD CN1102
(Page 48)
[SURROUND AMPLIFIER BOARD]
CN1301
CLP302
CN1204
CN1303
CN1302
EPT132
EPT131
(CHASSIS)
IC1301
1-659-625-
09

SECTION —
ation.

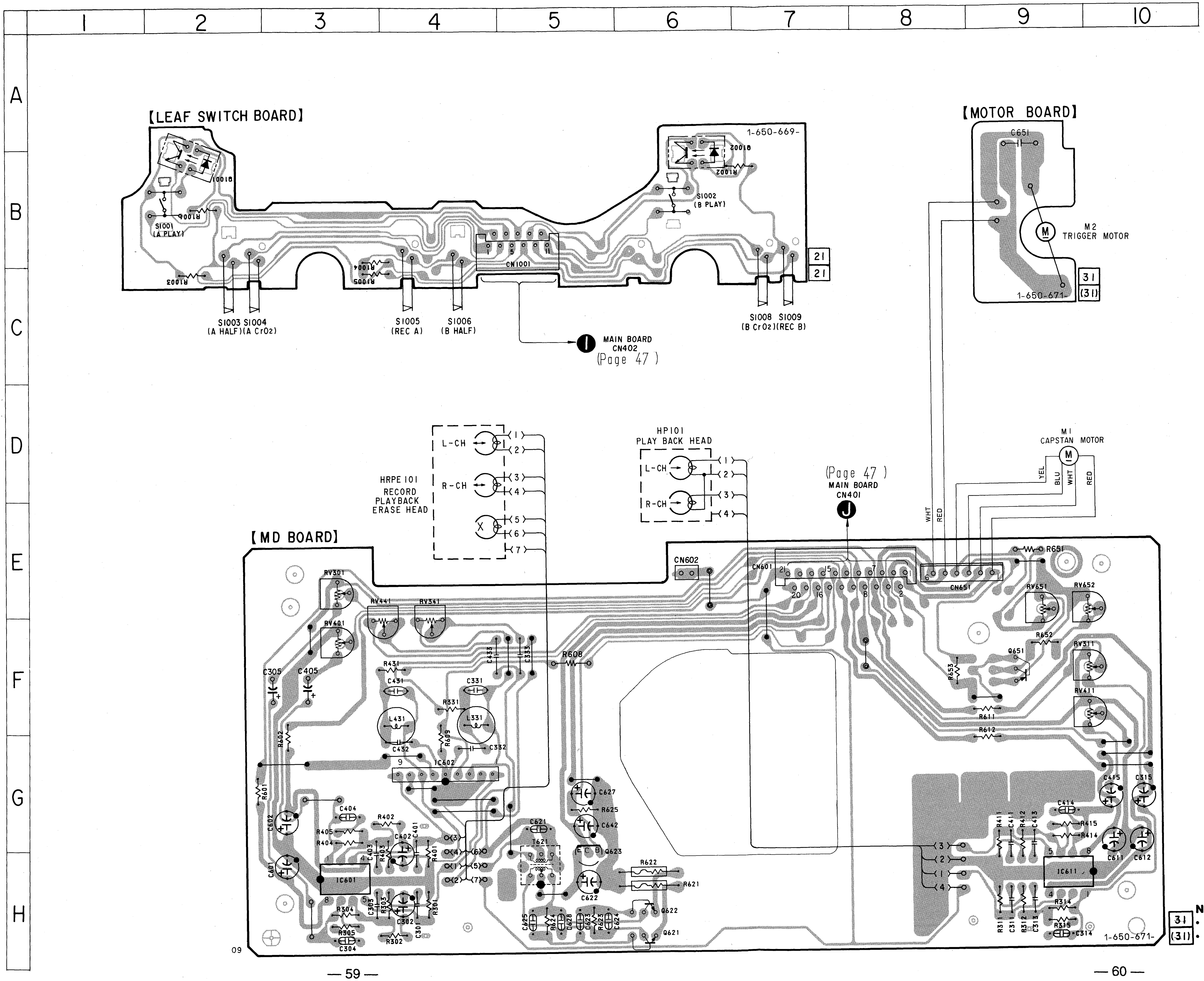
4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23



[POWER AMP BOARD]
[SENSOR (FAN) BOARD]
R BOARD]
[TRANSFORMER BOARD]
MAIN BOARD CN1001 (Page 47)
MAIN BOARD CN1102 (Page 48)
(CHASSIS)
EXCEPT US,CND,MODEL
EXCEPT US,CND MODEL
EXCEPT AEP,UK,G,IT MODEL
AEP,UK,G,IT MODEL
CENTER SPEAKER
REAR SPEAKER
FRONT SPEAKER
TM1203
TM1202
TM1201
IC1201
IC1202
IC1301
C1290
C1291
C1286
C1287
RY1201
RY1202
RY1203
RY1204
CN1201
CN1202
CN1205
CN206
CN1295
CN1301
CN1302
CN1303
CN1204
EPT121
EPT131
CLP123
CLP124
I-659-622-
I-659-623-
I-659-624-
I-659-625-
T1601 POWER TRANSFORMER
NOT REPLACEABLE BUILT IN TRANSFORMER
US,CND MODEL
EXCEPT US,CND MODEL
EXCEPT US,CND,E,EA, SP,HK,AR,IA,PX MODEL
E,EA,SP,HK,AR,IA,PX MODEL
S1601
110-120V
220-240V
VOLTAGE SELECTOR
AC IN
F1602
F1603
F1604
F1605
F1606
CN1601
CN1602
JW1614
CLP162
CLP161

6-15. PRINTED WIRING BOARD — DECK SECTION —

• See page 18 for Circuit Boards Location.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A
B
C
D
E
F
G
H
[LEAF SWITCH BOARD]
1-650-669-
S1001 (A PLAY)
S1002 (B PLAY)
CN1001
S1003 S1004 (A HALF) (A CrO2)
S1005 (REC A)
S1006 (B HALF)
S1008 S1009 (B CrO2) (REC B)
I MAIN BOARD CN402 (Page 47)
21
[MOTOR BOARD]
C651
M2 TRIGGER MOTOR
1-650-671-
31
(31)
HRPE101 RECORD PLAYBACK ERASE HEAD
L-CH
R-CH
HP101 PLAY BACK HEAD
(Page 47) MAIN BOARD CN401
J
M1 CAPSTAN MOTOR
YEL
BLU
WHT
RED
[MD BOARD]
CN602
CN601
CN651
RV301
RV441
RV361
RV401
RV651
RV652
RV311
RV411
R608
R651
R652
R653
Q651
R611
R612
C305
C405
R431
C431
C331
R331
L431
L331
C432
C332
R609
C433
C333
IC602
R402
R601
C602
C601
C404
R405
R404
R402
C402
C401
C403
R403
R401
IC601
R304
C303
R303
C302
R301
R305
C304
R302
C301
C627
R625
C642
C621
T621
Q623
C622
R622
R621
Q622
Q621
C625
R624
C628
R623
C624
C415
C315
C414
R411
C411
R412
C413
R415
R414
C611
C612
IC611
R311
C311
R312
C313
R314
R315
C314
1-650-671-
09

• Semiconductor Location

Ref. No.	Location
IC601	H-3
IC602	G-4
IC611	H-9
Q621	I-6
Q622	H-6
Q623	H-5
Q651	F-9
Q1001	B-2
Q1002	B-6

Note:

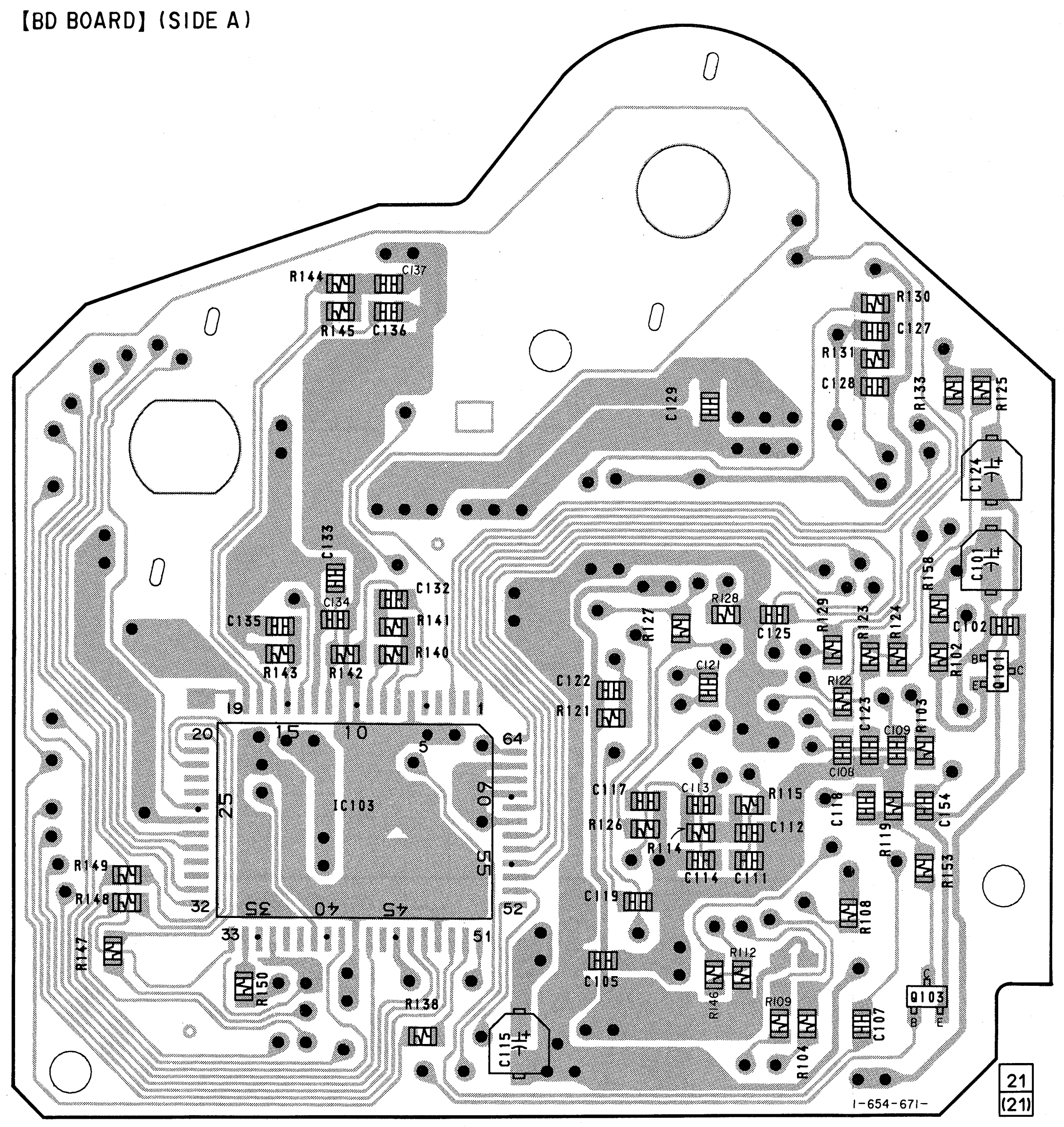
- o—— : parts extracted from the component side.
- ▨ : Pattern from the side which enable seeing.

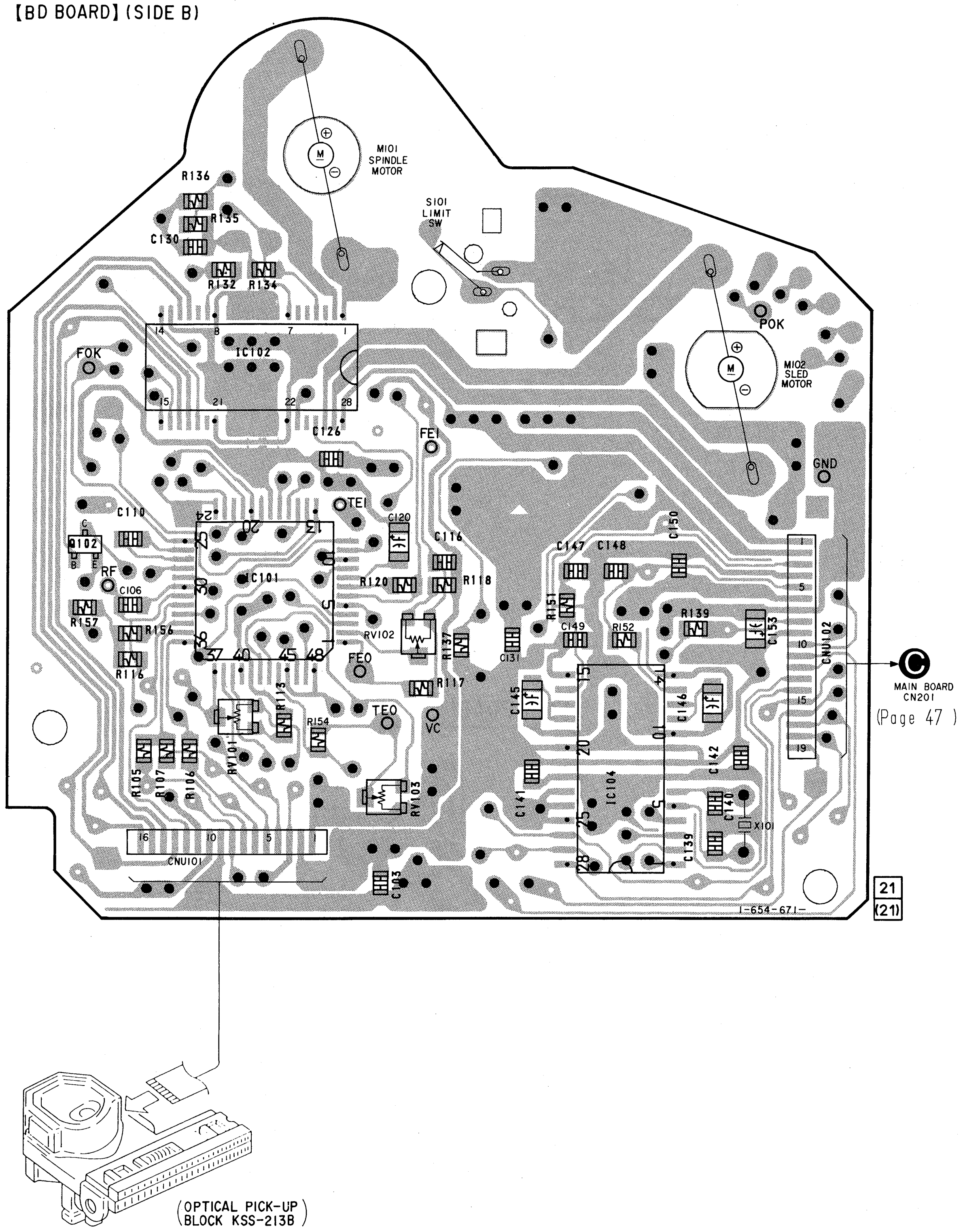
6-16. PRINTED WIRING BOARD — CD SECTION —

- See page 18 for Circuit Boards Location.

- **Semiconductor Location**

Ref. No.	Location
IC101	E-9
IC102	C-9
IC103	E-3
IC104	F-11
Q101	D-7
Q102	D-8
Q103	F-6

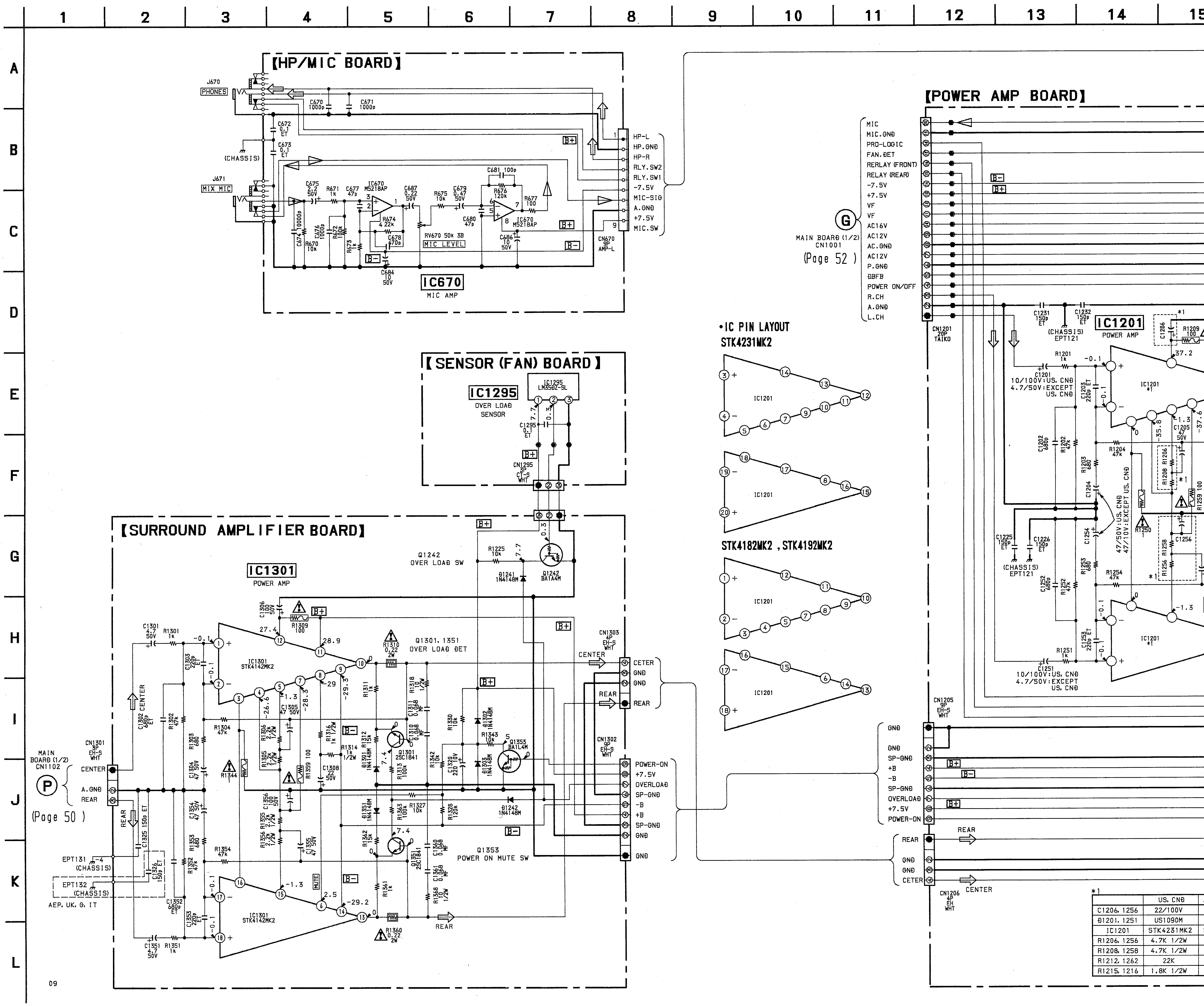

[BD BOARD] (SIDE A)
IC103
R144 C137 R145 C136
C129 R130 C127 R131 C128 R133 R125
C124 C101
C133 C134 C135 C132 R141 R140 R143 R142
R127 R128 C125 R129 R123 R124 R158 C102
C121 R122 C123 R103 R102 Q101
C122 R121 C108 C109
C117 C113 R115 C118 R119 C154
R126 R114 C112 C114 C111 R153
R149 R148 R147 R150 R138 C119 C105 C115
R112 R146 R108 R109 R104 C107 Q103
1-654-671-
21 (21)


[BD BOARD] (SIDE B)
M101 SPINDLE MOTOR
S101 LIMIT SW
M102 SLED MOTOR
R136 R135 C130 R132 R134
IC102
FOK POK FE GND TE
C126 C110 Q102 RF C106 R157 R156 R116
IC101 C120 C116 R120 R118 RV102 FEO
R137 R117 C131 TEO VC
R113 R154 RV101 RV103
R105 R107 R106
C147 C148 C150 R151 C149 R152 R139 C153
IC104 C145 C146 C142 C141 C140 C139 X101
CN101 CN102
C143
MAIN BOARD CN201
(Page 47)
1-654-671-
21 (21)
(OPTICAL PICK-UP BLOCK KSS-213B)

09

Note:
- ○— : parts extracted from the component side.
- ● : Through hole.
- ▨ : Pattern from the side which enable seeing. (The other layer's patterns are not indicated.)

6-19. SCHEMATIC DIAGRAM — POWER SECTION —


1
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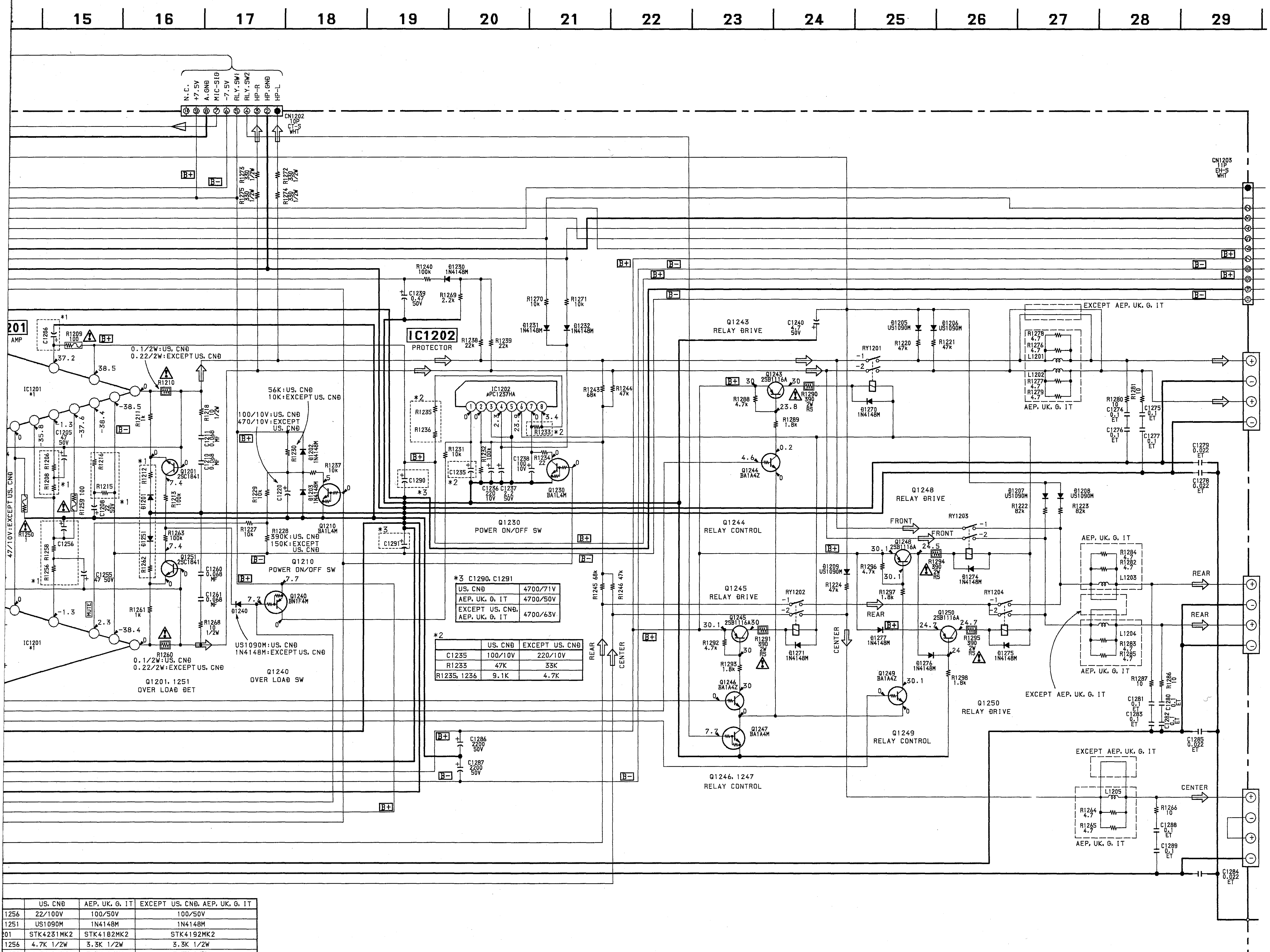
11
12
13
14
A
B
C
D
E
F
G
H
I
J
K
L
[HP/MIC BOARD]
J670
PHONES
J671
MIX MIC
(CHASSIS)
IC670
MIC AMP
RV670 50k 3B
MIC LEVEL
CN670
9P
AMP-L
HP-L
HP.GND
HP-R
RLY.SW2
RLY.SW1
-7.5V
MIC-SIG
A.GND
+7.5V
MIC.SW
[SENSOR (FAN) BOARD]
IC1295
OVER LOAD SENSOR
IC1295
LM3502-SL
CN1295
3P
CT-S
WHT
[SURROUND AMPLIFIER BOARD]
IC1301
POWER AMP
IC1301
STK4142MK2
Q1242
OVER LOAD SW
Q1301, 1351
OVER LOAD DET
Q1353
POWER ON MUTE SW
MUTE
MAIN BOARD (1/2)
CN1102
CN1301
9P
EH-S
WHT
CENTER
A.GND
REAR
(Page 50)
EPT131
(CHASSIS)
EPT132
(CHASSIS)
AEP, UK, G, IT
CN1303
4P
EH-S
WHT
CETER
GND
GND
REAR
CN1302
8P
EH-S
WHT
POWER-ON
+7.5V
OVERLOAD
SP-GND
-B
+B
SP-GND
GND
•IC PIN LAYOUT
STK4231MK2
STK4182MK2, STK4192MK2
IC1201
[POWER AMP BOARD]
MIC
MIC.GND
PRO-LOGIC
FAN.DET
RERLAY (FRONT)
RELAY (REAR)
-7.5V
+7.5V
VF
VF
AC16V
AC12V
AC.GND
AC12V
P.GND
DBFB
POWER ON/OFF
R.CH
A.GND
L.CH
MAIN BOARD (1/2)
CN1001
(Page 52)
CN1201
20P
TAIKO
IC1201
POWER AMP
(CHASSIS)
EPT121
C1201
10/100V:US, CND
4.7/50V:EXCEPT US, CND
C1251
10/100V:US, CND
4.7/50V:EXCEPT US, CND
47/50V:US, CND
47/10V:EXCEPT US, CND
CN1205
9P
EH-S
WHT
GND
GND
SP-GND
+B
-B
SP-GND
OVERLOAD
+7.5V
POWER-ON
REAR
GND
GND
CETER
CN1206
4P
EH
WHT
CENTER
09

*1

	US, CNĐ
C1206, 1256	22/100V
Đ1201, 1251	US1090M
IC1201	STK4231MK2
R1206, 1256	4.7K 1/2W
R1208, 1258	4.7K 1/2W
R1212, 1262	22K
R1215, 1216	1.8K 1/2W


15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
N.C.
+7.5V
A.GND
MIC-SIG
-7.5V
RLY.SW1
RLY.SW2
HP-R
HP.GND
HP-L
CN1202
10P
CT-S
WHT
CN1203
11P
EH-S
WHT
IC1202
PROTECTOR
IC1202
μPC1237HA
Q1230
POWER ON/OFF SW
Q1210
POWER ON/OFF SW
Q1240
OVER LOAD SW
Q1201, 1251
OVER LOAD DET
0.1/2W:US, CND
0.22/2W:EXCEPT US, CND
56K:US, CND
10K:EXCEPT US, CND
100/10V:US, CND
470/10V:EXCEPT US, CND
390K:US, CND
150K:EXCEPT US, CND
US1090M:US, CND
1N4148M:EXCEPT US, CND
47/10V:EXCEPT US, CND
MUTE
Q1243
RELAY DRIVE
Q1244
RELAY CONTROL
Q1245
RELAY DRIVE
Q1246, 1247
RELAY CONTROL
Q1248
RELAY DRIVE
Q1249
RELAY CONTROL
Q1250
RELAY DRIVE
RY1201
RY1202
RY1203
RY1204
FRONT
REAR
CENTER
EXCEPT AEP, UK, G, IT
AEP, UK, G, IT
C1286
2200
50V
C1287
2200
50V

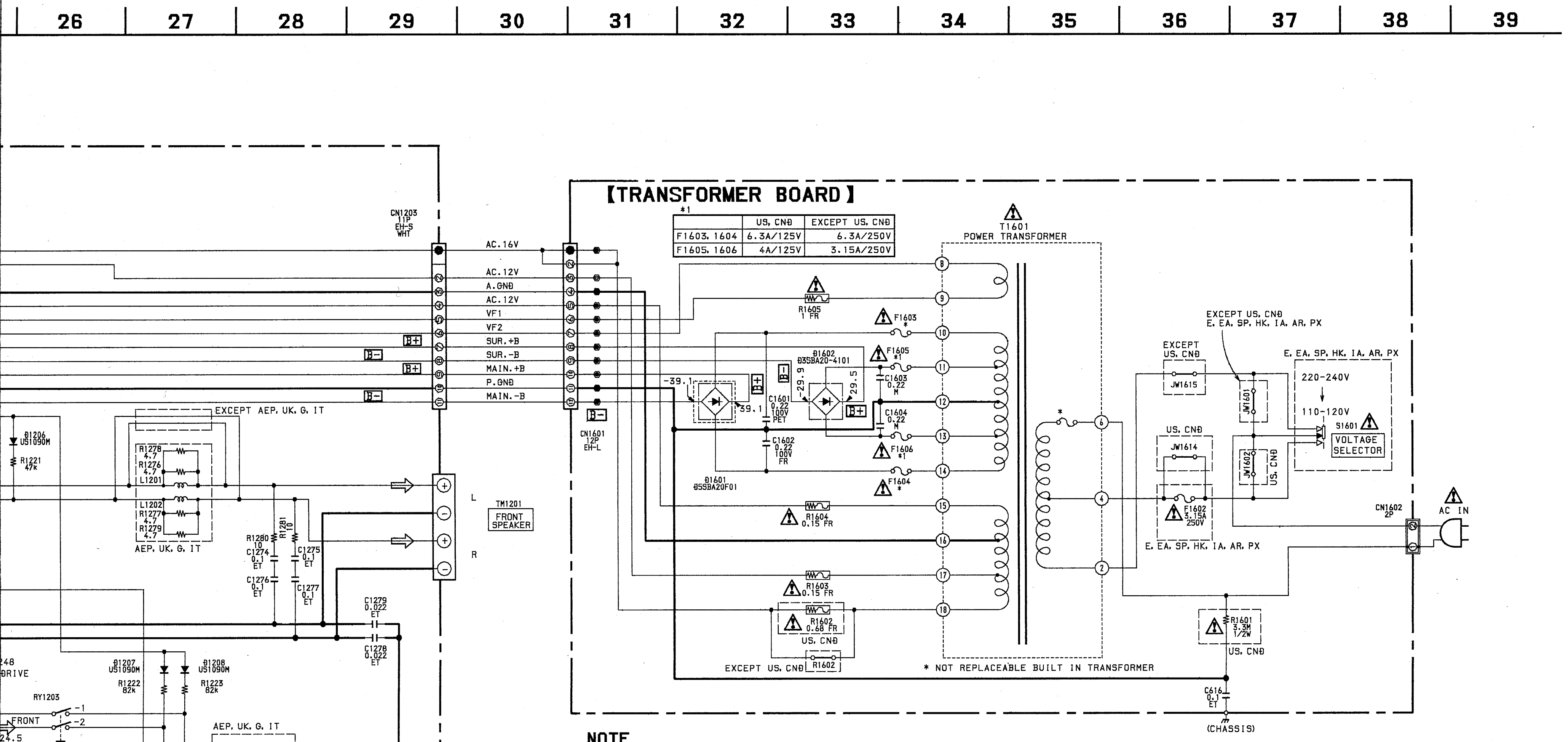
	US, CND	AEP, UK, G, IT	EXCEPT US, CND, AEP, UK, G, IT
1256	22/100V	100/50V	100/50V
1251	US1090M	1N4148M	1N4148M
201	STK4231MK2	STK4182MK2	STK4192MK2
1256	4.7K 1/2W	3.3K 1/2W	3.3K 1/2W
1258	4.7K 1/2W	3.3K 1/2W	3.3K 1/2W
1262	22K	15K	15K
1216	1.8K 1/2W	1K 1/2W	1K 1/2W

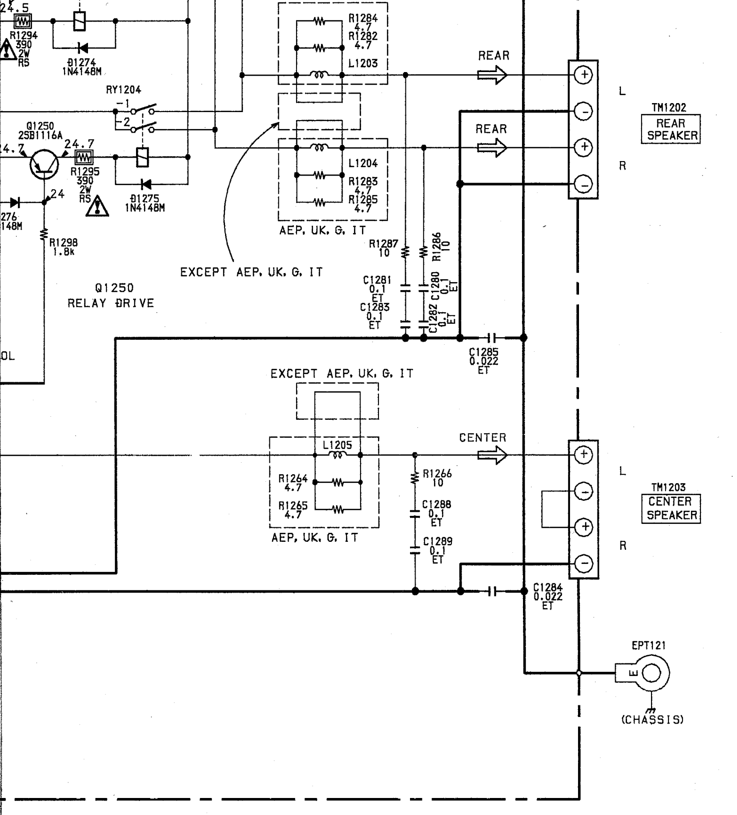
*3 C1290, C1291

US, CND	4700/71V
AEP, UK, G, IT	4700/50V
EXCEPT US, CND, AEP, UK, G, IT	4700/63V

*2

	US, CND	EXCEPT US, CND
C1235	100/10V	220/10V
R1233	47K	33K
R1235, 1236	9.1K	4.7K


26
27
28
29
30
31
32
33
34
35
36
37
38
39
CN1203 11P EH-S WHT
AC.16V
AC.12V
A.GND
AC.12V
VF1
VF2
SUR.+B
SUR.-B
MAIN.+B
P.GND
MAIN.-B
B+
B-
EXCEPT AEP, UK, G, IT
D1206 US1090M
R1221 47k
R1278 4.7
R1276 4.7
L1201
L1202
R1277 4.7
R1279 4.7
AEP, UK, G, IT
R1280 10
R1281 10
C1274 0.1 ET
C1275 0.1 ET
C1276 0.1 ET
C1277 0.1 ET
C1279 0.022 ET
C1278 0.022 ET
L
R
TM1201
FRONT SPEAKER
248 DRIVE
D1207 US1090M
D1208 US1090M
R1222 82k
R1223 82k
RY1203
FRONT
24.5
R1294 390 2W RS
D1274 1N4148M
AEP, UK, G, IT
R1284 4.7
R1282 4.7
L1203
REAR
RY1204
Q1250 2SB1116A
24.7
R1295 390 2W RS
24
D1275 1N4148M
R1298 1.8k
L1204
R1283 4.7
R1285 4.7
TM1202
REAR SPEAKER
EXCEPT AEP, UK, G, IT
Q1250 RELAY DRIVE
R1287 10
R1286 10
C1281 0.1 ET
C1280 0.1 ET
C1283 0.1 ET
C1282 0.1 ET
C1285 0.022 ET
【TRANSFORMER BOARD】
*1
US, CND | EXCEPT US, CND
F1603, 1604 | 6.3A/125V | 6.3A/250V
F1605, 1606 | 4A/125V | 3.15A/250V
T1601
POWER TRANSFORMER
CN1601 12P EH-L
R1605 1 FR
F1603 *
F1605 *1
D1602 D3SBA20-4101
-39.1
39.1
-29.9
29.5
C1601 0.22 100V PET
C1602 0.22 100V FR
C1603 0.22 M
C1604 0.22 M
F1606 *1
F1604 *
D1601 D5SBA20F01
R1604 0.15 FR
R1603 0.15 FR
R1602 0.68 FR
US, CND
EXCEPT US, CND
R1602
* NOT REPLACEABLE BUILT IN TRANSFORMER
EXCEPT US, CND
E, EA, SP, HK, IA, AR, PX
EXCEPT US, CND
JW1615
JW1601
US, CND
JW1614
JW1602
F1602 3.15A 250V
E, EA, SP, HK, IA, AR, PX
220-240V
110-120V
S1601
VOLTAGE SELECTOR
CN1602 2P
AC IN
R1601 3.3M 1/2W
US, CND
C616 0.1 ET
(CHASSIS)


OL
EXCEPT AEP, UK, G, IT
L1205
R1264 4.7
R1265 4.7
AEP, UK, G, IT
CENTER
R1266 10
C1288 0.1 ET
C1289 0.1 ET
C1284 0.022 ET
L
R
TM1203
CENTER SPEAKER
EPT121
E
(CHASSIS)

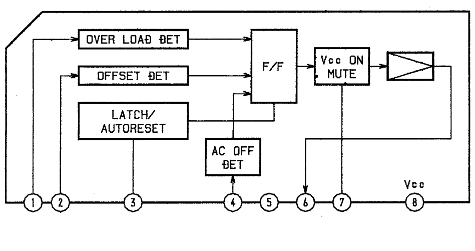
NOTE

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- :nonflammable resistor.
- :fusible resistor.
- :panel designation.

Note:	Note:
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- B+ :B+ Line.
- B- :B- Line.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark:FM
- Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.

IC1202 μPC1237HA

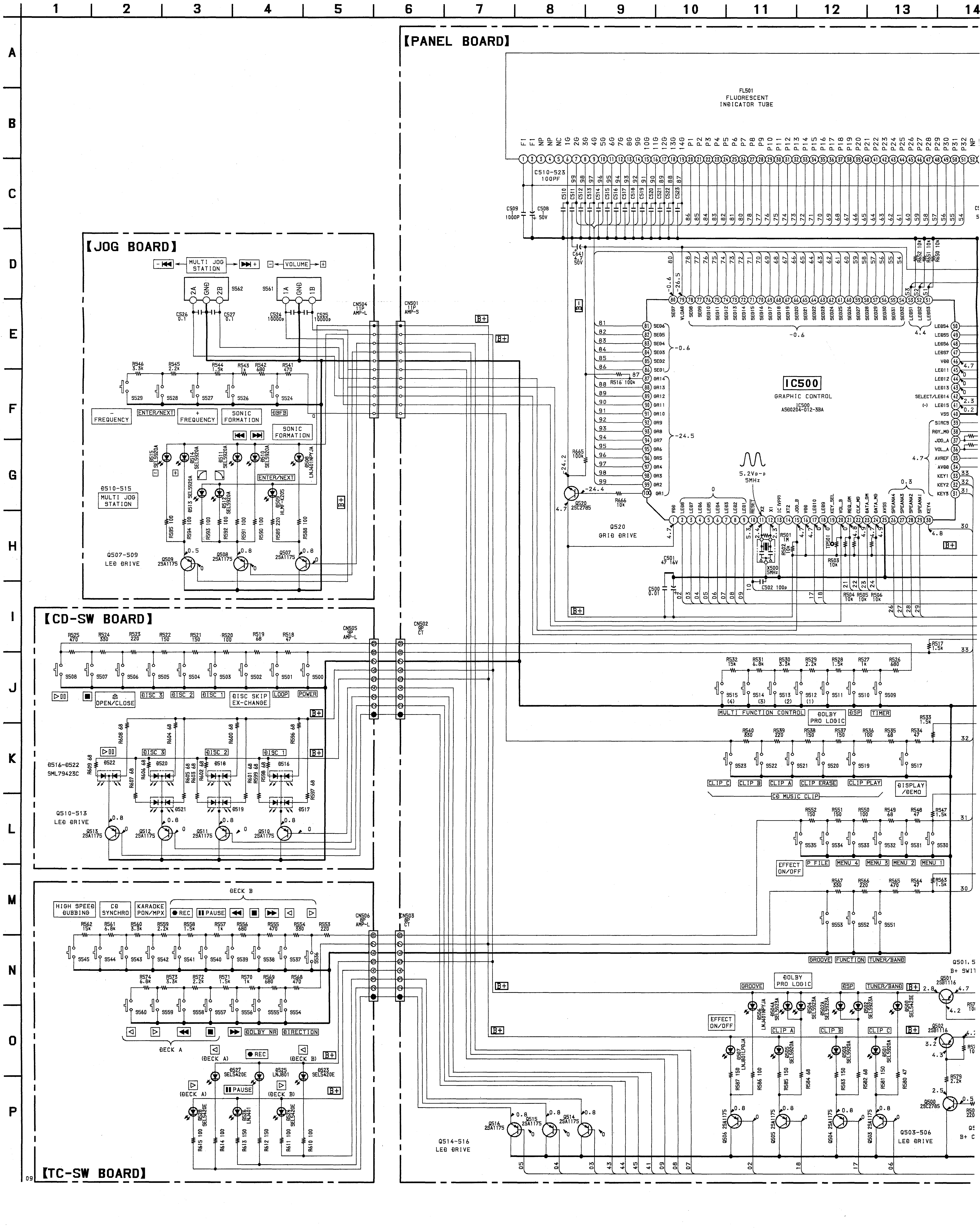

OVER LOAD DET
OFFSET DET
LATCH/ AUTORESET
AC OFF DET
F/F
Vcc ON MUTE
Vcc
1
2
3
4
5
6
7
8

- Abbreviation
  CND:Canadian model.
  G :German model.
  IT :Italian model.
  EA :Saudi Arabia model.
  SP :Singapore model.
  AR :Argentine model.
  IA :Indonesian model.
  HK :Hong Kong model.

- Signal path.
  ⇨ :FM
  ▷ :MIC

6-20. SCHEMATIC DIAGRAM — PANEL SECTION —

• See page 81 for IC Pin Function. (IC500)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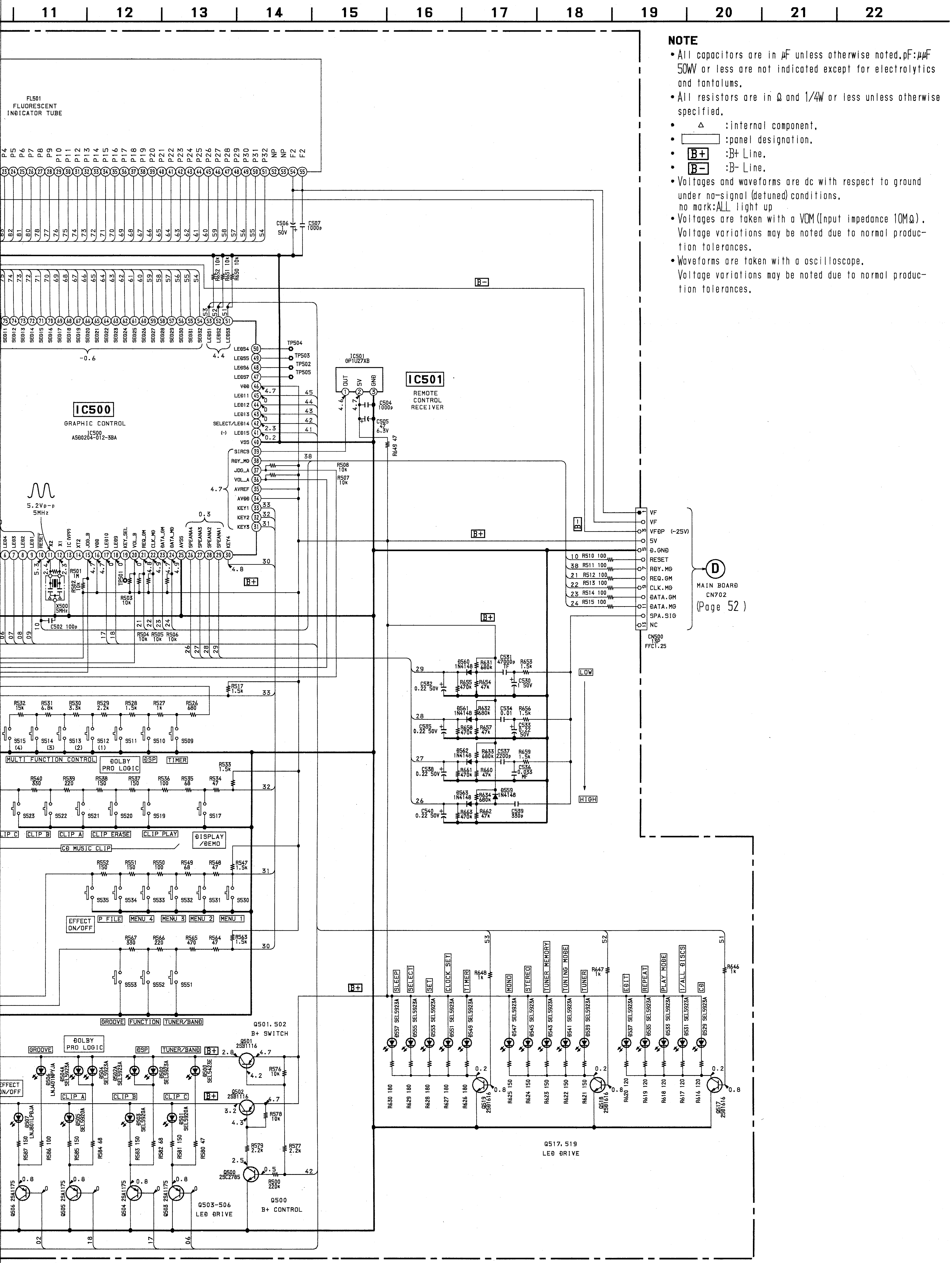
12
13
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
【PANEL BOARD】
FL501
FLUORESCENT
INDICATOR TUBE
C510-523
100PF
C509
1000P
C508
1
50V
C641
4.7
50V
IC500
GRAPHIC CONTROL
IC500
AS00204-012-3BA
-0.6
-24.5
5.2Vp-p
5MHz
Q520
2SC2785
Q520
GRID DRIVE
R665
100k
R666
10k
R516 100k
C501
47 16V
C500
0.01
C502 100p
X500
5MHz
R501
1M
R502
10k
R503
10k
R504 R505 R506
10k 10k 10k
B+
【JOG BOARD】
MULTI JOG
STATION
VOLUME
S562
S561
C526
0.1
C527
0.1
C524
10000p
C525
10000p
CN504
11P
AMP-L
CN501
11P
AMP-S
R946
3.3k
R545
2.2k
R544
1.5k
R543
1k
R542
680
R541
470
S529
S528
S527
S526
S525
S524
FREQUENCY
ENTER/NEXT
FREQUENCY
SONIC
FORMATION
DBFB
SONIC
FORMATION
ENTER/NEXT
D510-515
MULTI JOG
STATION
Q507-509
LED DRIVE
Q509
2SA1175
Q508
2SA1175
Q507
2SA1175
【CD-SW BOARD】
CN505
9P
AMP-L
CN502
9P
CT
R525
470
R524
330
R523
220
R522
150
R521
150
R520
100
R519
68
R518
47
S508
S507
S506
S505
S504
S503
S502
S501
S500
OPEN/CLOSE
DISC 3
DISC 2
DISC 1
DISC SKIP
EX-CHANGE
LOOP
POWER
D516-D522
SML79423C
Q510-513
LED DRIVE
Q513
2SA1175
Q512
2SA1175
Q511
2SA1175
Q510
2SA1175
【TC-SW BOARD】
HIGH SPEED
DUBBING
CD
SYNCHRO
KARAOKE
PON/MPX
DECK B
REC
PAUSE
CN506
13P
AMP-L
CN503
13P
CT
R562
15k
R561
6.8k
R560
3.3k
R559
2.2k
R558
1.5k
R557
1k
R556
680
R555
470
R554
330
R553
220
S545
S544
S543
S542
S541
S540
S539
S538
S537
S536
R574
6.8k
R573
3.3k
R572
2.2k
R571
1.5k
R570
1k
R569
680
R568
470
S560
S559
S558
S557
S556
S555
S554
DOLBY NR
DIRECTION
DECK A
(DECK A)
REC
(DECK B)
D527
SEL5420E
D525
LNJ801
D523
SEL5420E
(DECK A)
PAUSE
(DECK B)
R615 100
R614 100
R613 150
R612 150
R611 100
R610 100
Q514-516
LED DRIVE
Q516
2SA1175
Q515
2SA1175
Q514
2SA1175
R532
15k
R531
6.8k
R530
3.3k
R529
2.2k
R528
1.5k
R527
1k
R526
680
S515
(4)
S514
(3)
S513
(2)
S512
(1)
S511
S510
S509
MULTI FUNCTION CONTROL
DOLBY
PRO LOGIC
DSP
TIMER
R533
1.5k
R540
330
R539
220
R538
150
R537
150
R536
100
R535
68
R534
47
S523
S522
S521
S520
S519
S517
CLIP C
CLIP B
CLIP A
CLIP ERASE
CLIP PLAY
DISPLAY
/DEMO
CD MUSIC CLIP
R517
1.5k
R552
150
R551
150
R550
100
R549
68
R548
47
R547
1.5k
S535
S534
S533
S532
S531
S530
EFFECT
ON/OFF
P FILE
MENU 4
MENU 3
MENU 2
MENU 1
R567
330
R566
220
R565
470
R564
47
R563
1.5k
S553
S552
S551
GROOVE
FUNCTION
TUNER/BAND
GROOVE
DOLBY
PRO LOGIC
DSP
TUNER/BAND
EFFECT
ON/OFF
CLIP A
CLIP B
CLIP C
Q503-506
LED DRIVE
Q506
2SA1175
Q505
2SA1175
Q504
2SA1175
Q503
2SA1175
Q501
2SB1116
Q502
2SB1116
Q500
2SC2785
R579
2.2k
Q501, 5
B+ SWI


11
12
13
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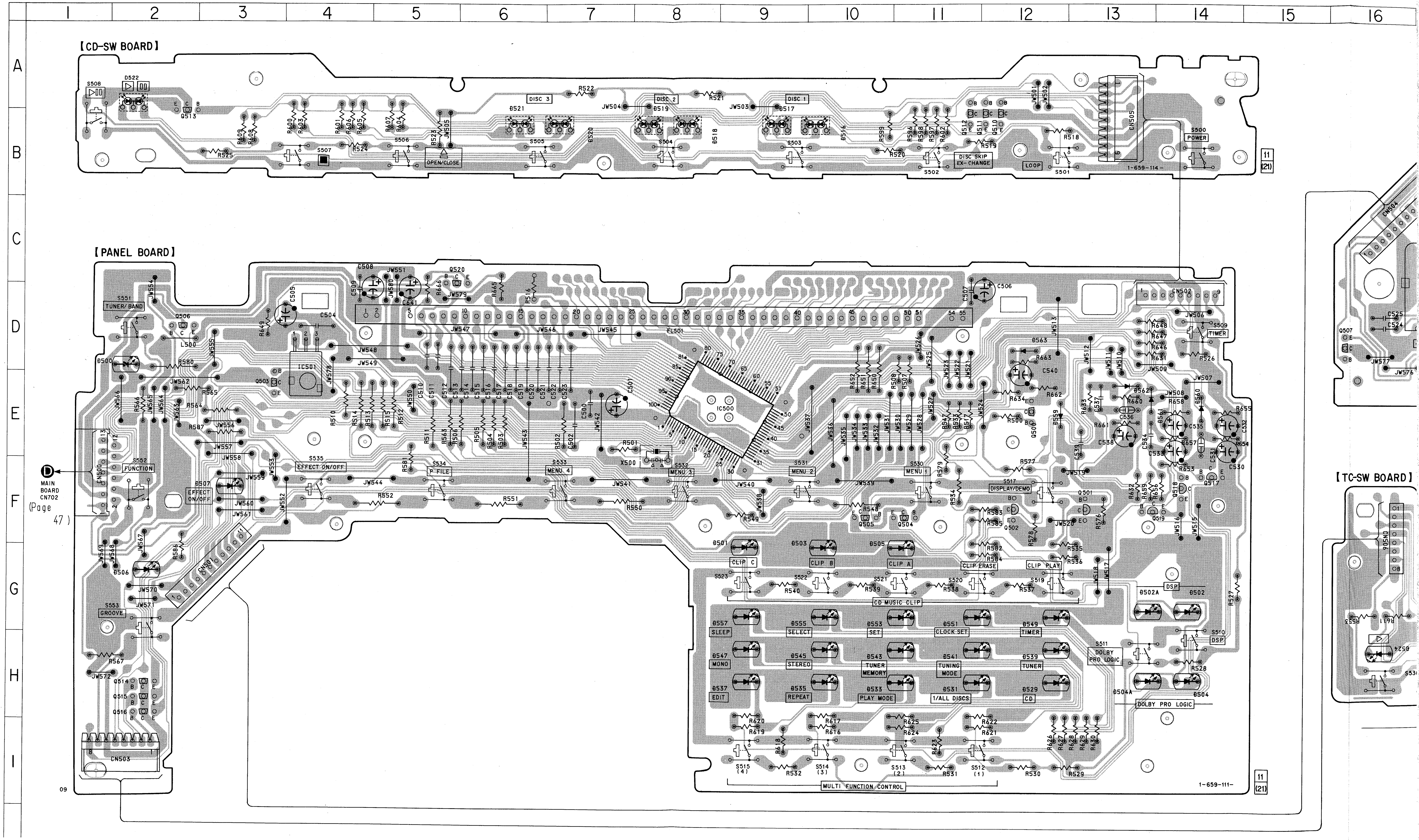
16
17
18
19
20
21
22
FL501
FLUORESCENT
INDICATOR TUBE
IC500
GRAPHIC CONTROL
IC500
AS00204-012-3BA
IC501
GP1U27XB
IC501
REMOTE
CONTROL
RECEIVER
TP502
TP503
TP504
TP505
5.2Vp-p
5MHz
X500
5MHz
C502 100p
C504 1000p
C505 47 6.3V
C506 50V
C507 1000p
B+
B−
VF
VF
VFDP (−25V)
5V
D.GND
RESET
RDY.MG
REQ.GM
CLK.MG
DATA.GM
DATA.MG
SPA.SIG
NC
CN500
13P
FFC1.25
D
MAIN BOARD
CN702
(Page 52)
LOW
HIGH
MULTI FUNCTION CONTROL
DOLBY PRO LOGIC
DSP
TIMER
CLIP C
CLIP B
CLIP A
CLIP ERASE
CLIP PLAY
DISPLAY /DEMO
CD MUSIC CLIP
EFFECT ON/OFF
P FILE
MENU 4
MENU 3
MENU 2
MENU 1
GROOVE
FUNCTION
TUNER/BAND
SLEEP
SELECT
SET
CLOCK SET
TIMER
MONO
STEREO
TUNER MEMORY
TUNING MODE
TUNER
EDIT
REPEAT
PLAY MODE
1/ALL DISCS
CD
Q501, 502
B+ SWITCH
Q501
2SB1116
Q502
2SB1116
Q500
2SC2785
Q500
B+ CONTROL
Q503-506
LED DRIVE
Q517, 519
LED DRIVE
Q517
2SD1616
Q518
2SD1616
Q519
2SD1616

NOTE

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- △ : internal component.
- ☐ : panel designation.
- **B+** : B+ Line.
- **B−** : B− Line.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark: ALL light up
- Voltages are taken with a VOM (Input impedance 10MΩ).
  Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.

6-21. PRINTED WIRING BOARD — PANEL SECTION —

- See page 18 for Circuit Boards Location.


1
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6
7
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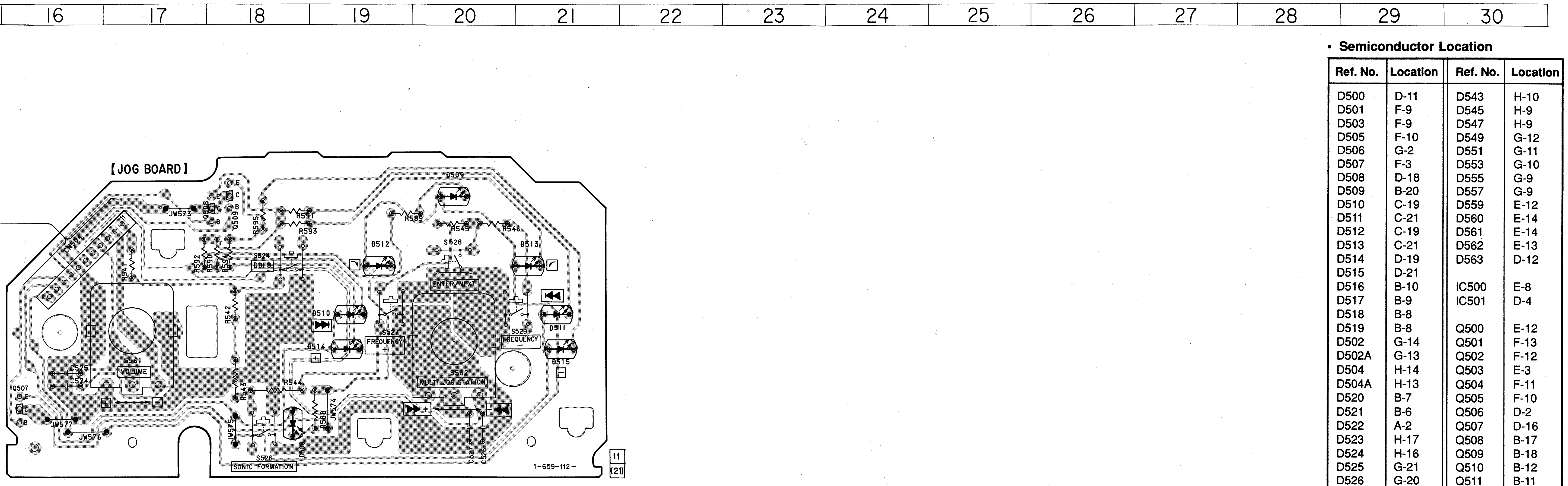
9
10
11
12
13
14
15
16
A
B
C
D
E
F
G
H
I
【CD-SW BOARD】
DISC 3
DISC 2
DISC 1
OPEN/CLOSE
DISC SKIP EX-CHANGE
LOOP
POWER
1-659-114-
11 (21)
【PANEL BOARD】
TUNER/ BAND
FUNCTION
EFFECT ON/OFF
GROOVE
P FILE
MENU 4
MENU 3
MENU 2
MENU 1
DISPLAY/DEMO
TIMER
IC501
IC500
FL501
CN502
CN503
CN500
X500
D
MAIN BOARD CN702
(Page 47)
CLIP C
CLIP B
CLIP A
CLIP ERASE
CLIP PLAY
CD MUSIC CLIP
DSP
SLEEP
SELECT
SET
CLOCK SET
TIMER
MONO
STEREO
TUNER MEMORY
TUNING MODE
TUNER
DOLBY PRO LOGIC
EDIT
REPEAT
PLAY MODE
1/ALL DISCS
CD
S515 (4)
S514 (3)
S513 (2)
S512 (1)
MULTI FUNCTION CONTROL
1-659-111-
11 (21)
09
【TC-SW BOARD】
CN504
CN506

[JOG BOARD]


15
16
17
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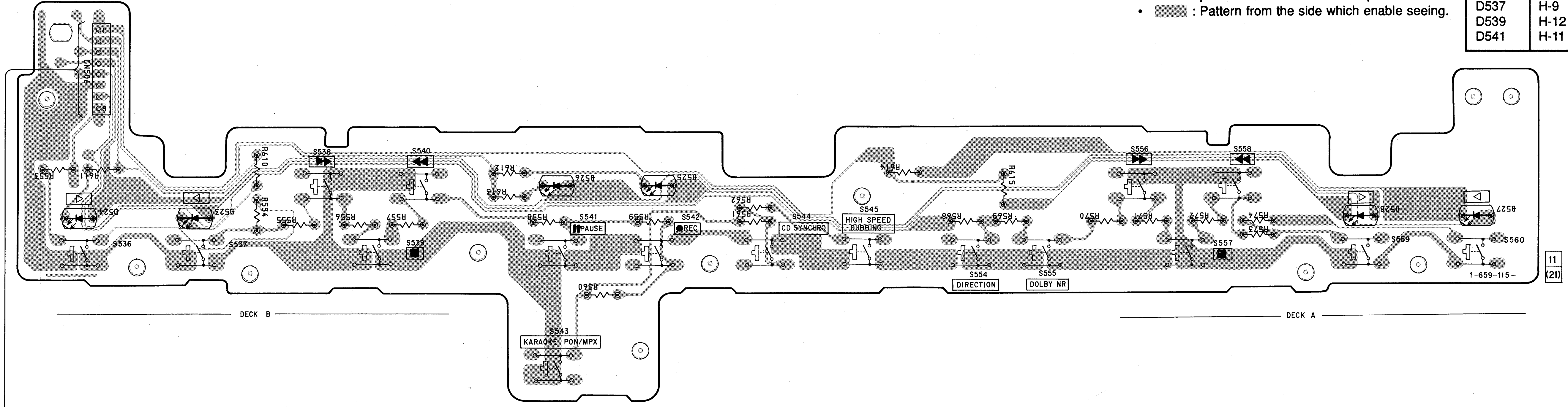
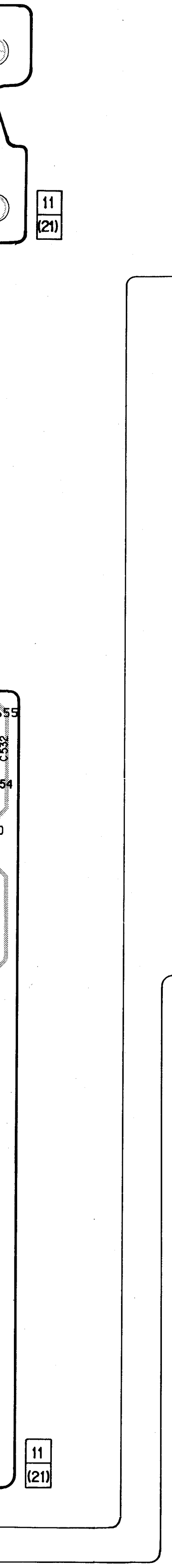
21
22
23
24
25
26
27
28
29
30
CN504
JW573
Q508
Q509
R595
R591
R593
R589
D509
R545
R546
D512
S528
ENTER/NEXT
D513
R541
R592
R590
R594
S524
DBFB
R542
D510
S527
FREQUENCY
+
S529
FREQUENCY
−
D511
D514
D515
S561
VOLUME
C525
C524
Q507
S562
MULTI JOG STATION
R543
R544
JW574
R588
JW575
D508
JW577
JW576
S526
SONIC FORMATION
C527
C526
1-659-112-
11
(21)

[TC-SW BOARD]


CN506
R610
R611
R553
D524
D523
R554
R555
S536
S537
S538
S540
R612
R613
D526
D525
R556
R557
S539
R558
S541
PAUSE
R559
S542
●REC
R562
R561
S544
CD SYNCHRO
S545
HIGH SPEED DUBBING
R614
R615
R568
R569
R570
R571
R572
R574
R573
S554
DIRECTION
S555
DOLBY NR
S556
S558
S557
D528
D527
S559
S560
R560
S543
KARAOKE PON/MPX
1-659-115-
11
(21)
DECK B
DECK A



Note:

- ○—— : parts extracted from the component side.
- ▨ : Pattern from the side which enable seeing.

- **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location
D500	D-11	D543	H-10
D501	F-9	D545	H-9
D503	F-9	D547	H-9
D505	F-10	D549	G-12
D506	G-2	D551	G-11
D507	F-3	D553	G-10
D508	D-18	D555	G-9
D509	B-20	D557	G-9
D510	C-19	D559	E-12
D511	C-21	D560	E-14
D512	C-19	D561	E-14
D513	C-21	D562	E-13
D514	D-19	D563	D-12
D515	D-21		
D516	B-10	IC500	E-8
D517	B-9	IC501	D-4
D518	B-8		
D519	B-8	Q500	E-12
D502	G-14	Q501	F-13
D502A	G-13	Q502	F-12
D504	H-14	Q503	E-3
D504A	H-13	Q504	F-11
D520	B-7	Q505	F-10
D521	B-6	Q506	D-2
D522	A-2	Q507	D-16
D523	H-17	Q508	B-17
D524	H-16	Q509	B-18
D525	G-21	Q510	B-12
D526	G-20	Q511	B-11
D527	H-29	Q512	B-11
D528	H-28	Q513	B-2
D529	H-12	Q514	H-2
D531	H-11	Q515	H-2
D533	H-10	Q516	H-2
D535	H-9	Q517	F-14
D537	H-9	Q518	F-14
D539	H-12	Q519	F-14
D541	H-11	Q520	C-5

6-22. IC PIN FUNCTIONS

• IC500 GRAPHIC CONTROL (ASD0204)

Pin No.	Pin Name	I/O	Function
1	VDD	–	+5V
2 to 9	$\overline{\text{LED8-1}}$	O	LED drive signal output.
10	$\overline{\text{RESET}}$	I	Reset signal input.
11	X2	O	X' tal (5 MHz).
12	X1	I	
13	IC (Vpp)	–	Ground
14	XT2	I	Not used. (Open)
15	JOG B	I	AMS encoder signal input.
16	VDD	–	+5V
17, 18	$\overline{\text{LED10, 9}}$	O	LED drive signal output.
19	KEY SEL	O	Key select control. (Not used) (Open)
20	VOL B	I	Volume encoder signal input.
21	REQ. GM	O	Request signal from/to master control.
22	CLK MG	I	Serial clock input from master control.
23	DATA GM	O	Serial data output to master control.
24	DATA MG	I	Serial data input from master control.
25	AVss	–	Ground
26 to 29	SPEANA 4–1	I	Spectram analizer signal input.
30 to 33	KEY 4–1	I	Key matrix input.
34	AVDD	–	+5V
35	AVREF	–	
36	VOL A	I	Volume encoder signal input.
37	JOG A	I	AMS encoder signal input.
38	RDY MG	I	Ready signal from master control.
39	SIRCS	I	SIRCS signal input.
40	Vss	–	Ground
41	LED 15	O	LED drive signal output.
42	LED SELECT	O	LED select signal output.
43 to 45	$\overline{\text{LED13–11}}$	O	LED drive signal output.
46	VDD	–	+5V
47 to 50	LEDS7–4	O	Not used.
51 to 53	LEDS3–1	O	LED drive signal output.
54 to 78	SEG32–8	O	Fluorescent indicator tube segment signal output.
79	V, LOAD	–	–25V for Fluorescent indicator tube
80 to 86	SEG7–1	O	Fluorescent indicator tube segment signal output.
87 to 100	GR14–1	O	Fluorescent indicator tube grid signal output.

• IC701 MASTER CONTROL (TMP87CP64YF)

Pin No.	Pin Name	I/O	Function
1	Vss	–	Ground
2	XOUT	O	X'tal (10 MHz).
3	XIN	I	
4	$\overline{\text{RESET}}$	I	Reset signal input.
5	XOUT	O	X'tal for clock (32.768 MHz).
6	XIN	I	
7	GND (test)	–	Ground
8	$\overline{\text{AC CUT}}$	I	Back up signal input.
9	SUPER WOOFER ON	O	Not used. (Pull up)
10	ST-MUTE ON	O	Mute signal output for tuner.
11	$\overline{\text{180-A-PLAY}}$	I	Tape detection signal input. (Not used) (Connected to ground)
12	$\overline{\text{180-B-PLAY}}$	I	
13	$\overline{\text{180-B-REC}}$	I	
14	V DET	I	Not used. (Open)
15	UP-SW	I	Disc table up detect. (Not used) (Pull up)
16	$\overline{\text{TRAY-CLOSE (ICD)}}$	I	Loading in detection signal input. (Not used) (Connected to ground)
17	ENCODER-0	I	Disctray address detect encoder input.
18	ENCODER-1	I	
19	ENCODER-2	I	
20	$\overline{\text{OUT SW OPEN}}$	I	Loading out detection signal input.
21	LOAD IN	O	Loading motor control signal output.
22	LOAD OUT	O	
23	TBL-L	O	Table motor control signal output.
24	TBL-R	O	
25	SCOR	I	Sub-code sync signal input.
26	TBL-SENS	I	CD Table sensor signal input.
27	RDS INT	I	RDS data start input.
28	RDS DATA	I	RDS data start output.
29	DF LAT	O	Latch signal for digital filter.
30	SENS	I	Table sence signal input.
31	$\overline{\text{XRST}}$	O	Reset signal output for CD.
32	MG-RDY	O	Ready signal to graphic control.
33	$\overline{\text{ADJ}}$	I	Test mode input.
34	$\overline{\text{GM-REQ}}$	I	Request signal from graphic control.
35	MG-CLK	O	Clock signal to graphic control.
36	GM-DATA	I	Data input from graphic control.
37	MG-DATA	O	Data output to graphic control.
38	CD-CLK	O	Clock output. Serial bus line.
39	$\overline{\text{ADJ-2}}$	I	Test mode input.
40	CD-DATA	O	Data output. Serial bus line.

Pin No.
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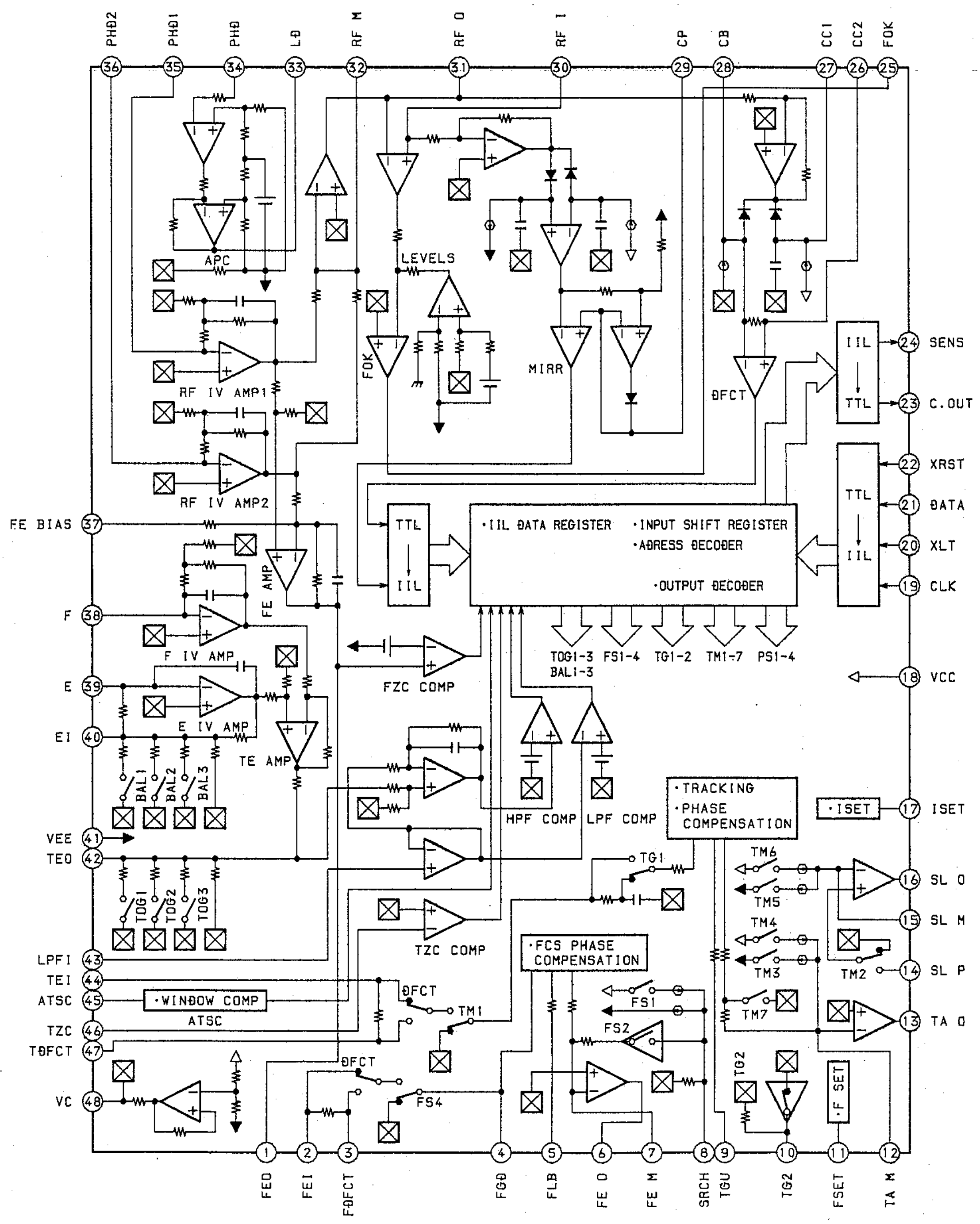
Pin No.	Pin Name	I/O	Function
41	AUB IN	I	Audio bus in/output. (Not used) (Open)
42	AUB OUT	O	
43	FOCUS SW	O	Focus switching signal output.
44	SQ-CLK	O	Subcode Q data read clock output.
45	SQ-DATA	I	Subcode Q data input.
46	X-LAT	O	Latch signal output for digital signal processor.
47	TEST	I	Test land.
48	VAREF	I	Analog reference voltage input.
49	VAss	–	Ground
50	Vss	–	
51	VDD	–	+5V
52	SPEC	I	Destination detection setting input.
53	DESTINATION	I	
54	DISC SENS	I	Slit sensor of disc table input.
55	TC RELAY	O	REC/PB select signal output.
56	A-SHUT	I	Control signal input from deck.
57	B-SHUT	I	
58	B-HALF	I	
59	A-HALF	I	
60	220-A-PLAY	I	
61	220-B-PLAY	I	
62	62427 LAT	O	PLL latch output.
63	K-CON-LAT	O	Not used. (Open)
64	VOL LAT (AV)	O	Latch signal for electrical volume.
65	REAR SP RELAY B	O	Rear speaker relay B Control output.
66	FRONT SP RELAY C	O	Front speaker relay C Control output.
67	$\overline{\text{POWER ON}}$	O	Power on signal output.
68	CD POWER	O	CD power control signal output.
69	$\overline{\text{PROLOG LAT}}$	O	Latch signal output for dolby pro logic.
70	$\overline{\text{MUTE}}$	O	Mute signal for AMP.
71	COM CLK	O	PLL clock output.
72	COM DIN	I	PLL data input.
73	COM DATA	O	PLL data output.
74	$\overline{\text{K CON ON}}$	O	Not used. (Open)
75	LIDDED LED	O	Disc No. LED drive signal output. (Not used) (Open)
76	MD/VIDEO	O	VIDEO/MD IN mute control signal output.
77	DBFB-HIGH	O	DBFB switching signal output.
78	PWM DUTY	I	Not used.
79	PRO LOGIC	O	Dolby pro logic control output.
80	$\overline{\text{TC A}}$	O	Deck A, B select output.

Pin No.		I/O	Function
81	$\overline{\text{NORM}}$	O	NORMAL/HIGH control signal output.
82	$\overline{\text{BIAS OFF}}$	O	Bias oscillation output.
83	$\overline{\text{REC MUTE}}$	O	Mute output.
84	$\overline{\text{NR OFF}}$	O	Dolby ON/OFF signal output.
85	PB	O	REC/PB control signal output.
86	$\overline{\text{PASS. AMP/DOLBY}}$	O	Dolby switching signal output.
87	$\overline{\text{LINE MUTE ON}}$	O	Mute signal output for deck.
88	$\overline{\text{CAP. M-HIGH}}$	O	Capstan motor control signal output.
89	A-TRG	O	Trigger motor control signal output.
90	B-TRG	O	
91	$\overline{\text{TRG LOW}}$	O	Trigger motor high/low contorol signal output.
92	$\overline{\text{CAP M ON}}$	O	Capstan motor ON/OFF control signal output.
93	$\overline{\text{STEREO}}$	I	Stereo dection signal from tuner.
94	$\overline{\text{TUNED}}$	I	Tuned detection signal from tuner.
95	ST-CE	O	Latch signal output for tuner.
96	$\overline{\text{DELAY SEL MIC}}$	O	Not used. (Open)
97	$\overline{\text{DELAY ON}}$	O	Not used. (Connected to ground)
98	DELAY LEVEL A	O	
99	DELAY LEVEL B	O	
100	VDD	–	+5V

6-23. IC BLOCK DIAGRAMS — CD SECTION —

IC101 CXA1782BQ


PHD2
PHD1
PHD
LD
RF M
RF O
RF I
CP
CB
CC1
CC2
FOK
APC
LEVELS
FOK
MIRR
DFCT
RF IV AMP1
RF IV AMP2
FE BIAS
FE AMP
F
F IV AMP
E
E IV AMP
EI
TE AMP
BAL1
BAL2
BAL3
VEE
TEO
TOG1
TOG2
TOG3
LPFI
TEI
ATSC
•WINDOW COMP
ATSC
TZC
TDFCT
VC
SENS
C.OUT
IIL
TTL
XRST
DATA
XLT
CLK
TTL
IIL
•IIL DATA REGISTER
•INPUT SHIFT REGISTER
•ADRESS DECODER
•OUTPUT DECODER
TOG1-3
BAL1-3
FS1-4
TG1-2
TM1-7
PS1-4
FZC COMP
VCC
HPF COMP
LPF COMP
•TRACKING
•PHASE COMPENSATION
•ISET
ISET
TG1
TM6
TM5
TM4
TM3
TM2
TM7
SL O
SL M
SL P
TA O
TZC COMP
•FCS PHASE COMPENSATION
FS1
FS2
DFCT
TM1
DFCT
FS4
TG2
•F SET
FEO
FEI
FDFCT
FGD
FLB
FE O
FE M
SRCH
TGU
TG2
FSET
TA M
1
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3
4
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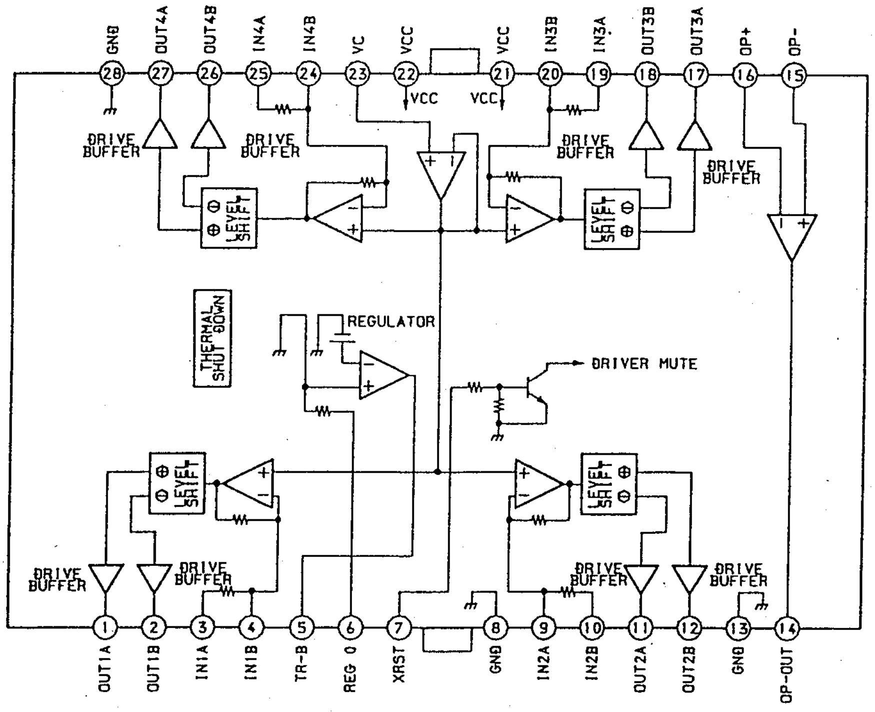
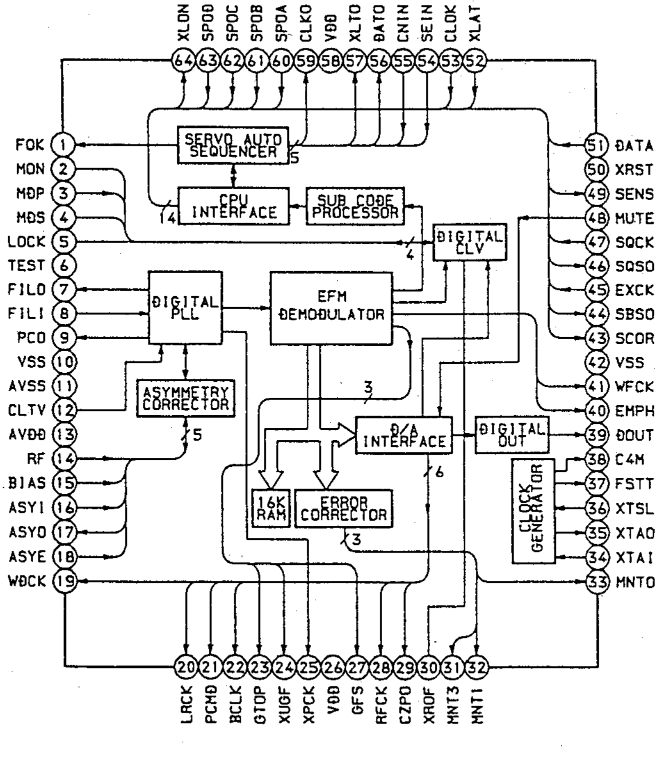
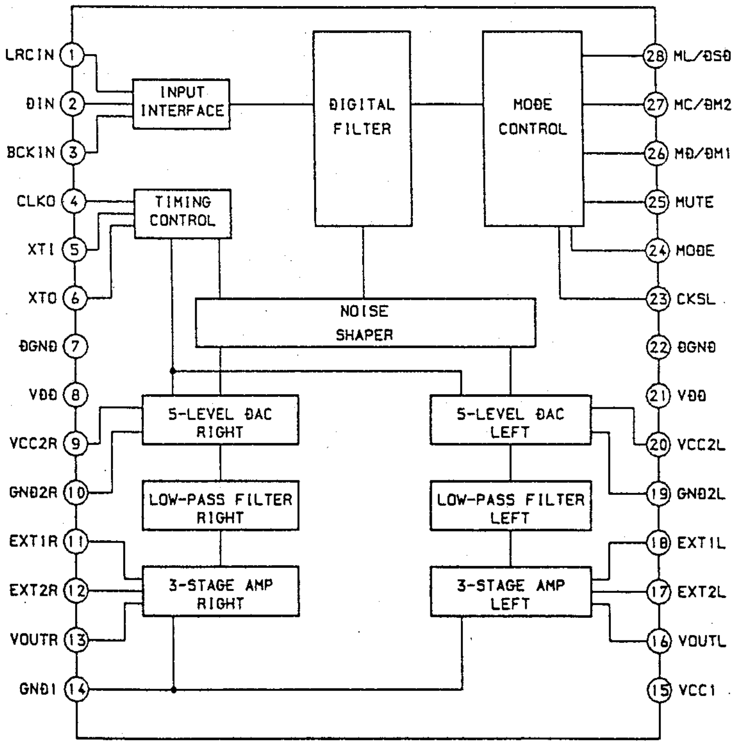
IC102 BA6397FP


GND
OUT4A
OUT4B
IN4A
IN4B
VC
VCC
VCC
IN3B
IN3A
OUT3B
OUT3A
OP+
OP-
28
27
26
25
24
23
22
21
20
19
18
17
16
15
VCC
VCC
DRIVE BUFFER
DRIVE BUFFER
DRIVE BUFFER
DRIVE BUFFER
LEVEL SHIFT
LEVEL SHIFT
THERMAL SHUT DOWN
REGULATOR
DRIVER MUTE
LEVEL SHIFT
LEVEL SHIFT
DRIVE BUFFER
DRIVE BUFFER
DRIVE BUFFER
DRIVE BUFFER
1
2
3
4
5
6
7
8
9
10
11
12
13
14
OUT1A
OUT1B
IN1A
IN1B
TR-B
REG 0
XRST
GND
IN2A
IN2B
OUT2A
OUT2B
GND
OP-OUT

IC103 CXD2507


XLON
SPOD
SPOC
SPOB
SPOA
CLKO
VDD
XLTO
DATO
CNIN
SEIN
CLOK
XLAT
64
63
62
61
60
59
58
57
56
55
54
53
52
SERVO AUTO SEQUENCER
5
CPU INTERFACE
14
SUB CODE PROCESSOR
DIGITAL CLV
4
DIGITAL PLL
EFM DEMODULATOR
ASYMMETRY CORRECTOR
5
3
D/A INTERFACE
DIGITAL OUT
16K RAM
ERROR CORRECTOR
3
6
CLOCK GENERATOR
FOK 1
MON 2
MDP 3
MDS 4
LOCK 5
TEST 6
FILO 7
FILI 8
PCO 9
VSS 10
AVSS 11
CLTV 12
AVDD 13
RF 14
BIAS 15
ASYI 16
ASYO 17
ASYE 18
WDCK 19
51 DATA
50 XRST
49 SENS
48 MUTE
47 SQCK
46 SQSO
45 EXCK
44 SBSO
43 SCOR
42 VSS
41 WFCK
40 EMPH
39 DOUT
38 C4M
37 FSTT
36 XTSL
35 XTAO
34 XTAI
33 MNTO
20
21
22
23
24
25
26
27
28
29
30
31
32
LRCK
PCMD
BCLK
GTOP
XUGF
XPCK
VDD
GFS
RFCK
CZPO
XROF
MNT3
MNT1

IC104 PCM1710U


LRCIN 1
DIN 2
BCKIN 3
CLKO 4
XTI 5
XTO 6
DGND 7
VDD 8
VCC2R 9
GND2R 10
EXT1R 11
EXT2R 12
VOUTR 13
GND1 14
INPUT INTERFACE
TIMING CONTROL
DIGITAL FILTER
MODE CONTROL
NOISE SHAPER
5-LEVEL DAC RIGHT
5-LEVEL DAC LEFT
LOW-PASS FILTER RIGHT
LOW-PASS FILTER LEFT
3-STAGE AMP RIGHT
3-STAGE AMP LEFT
28 ML/DS0
27 MC/DM2
26 MD/DM1
25 MUTE
24 MODE
23 CKSL
22 DGND
21 VDD
20 VCC2L
19 GND2L
18 EXT1L
17 EXT2L
16 VOUTL
15 VCC1

SECTION 7
EXPLODED VIEWS

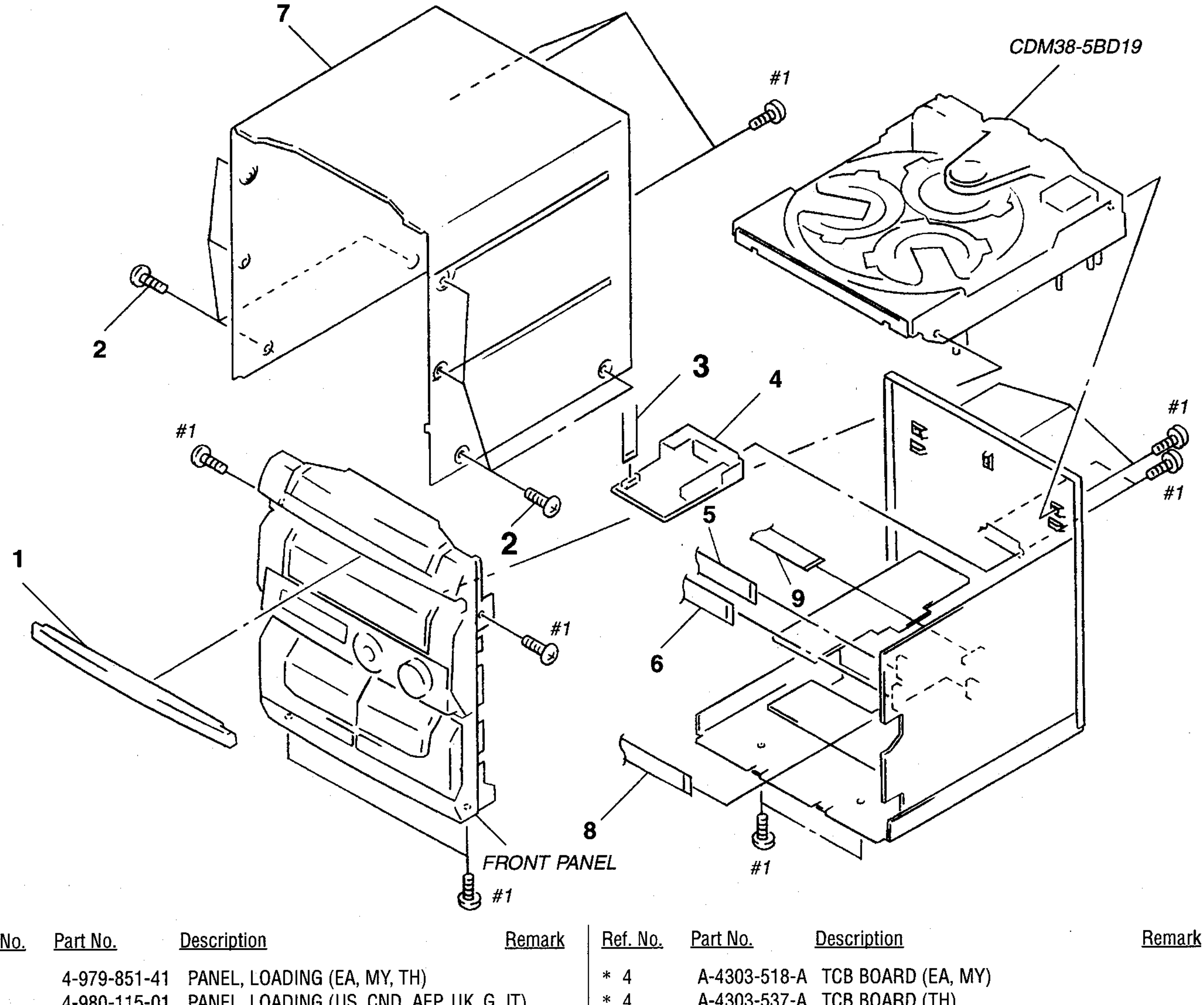
NOTE:

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.
- Abbreviation
  CND: Canadian model
  G: German model
  IT: Italian model
  EA: Saudi Arabia model
  HK: Hong Kong model
  SP: Singapore model
  MY: Malaysia model
  AUS: Australian model
  AR: Argentine model
  TH: Thailand model
  IA: Indonesian model
  E2: Without SW tuner model
  E3: With SW tuner model

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

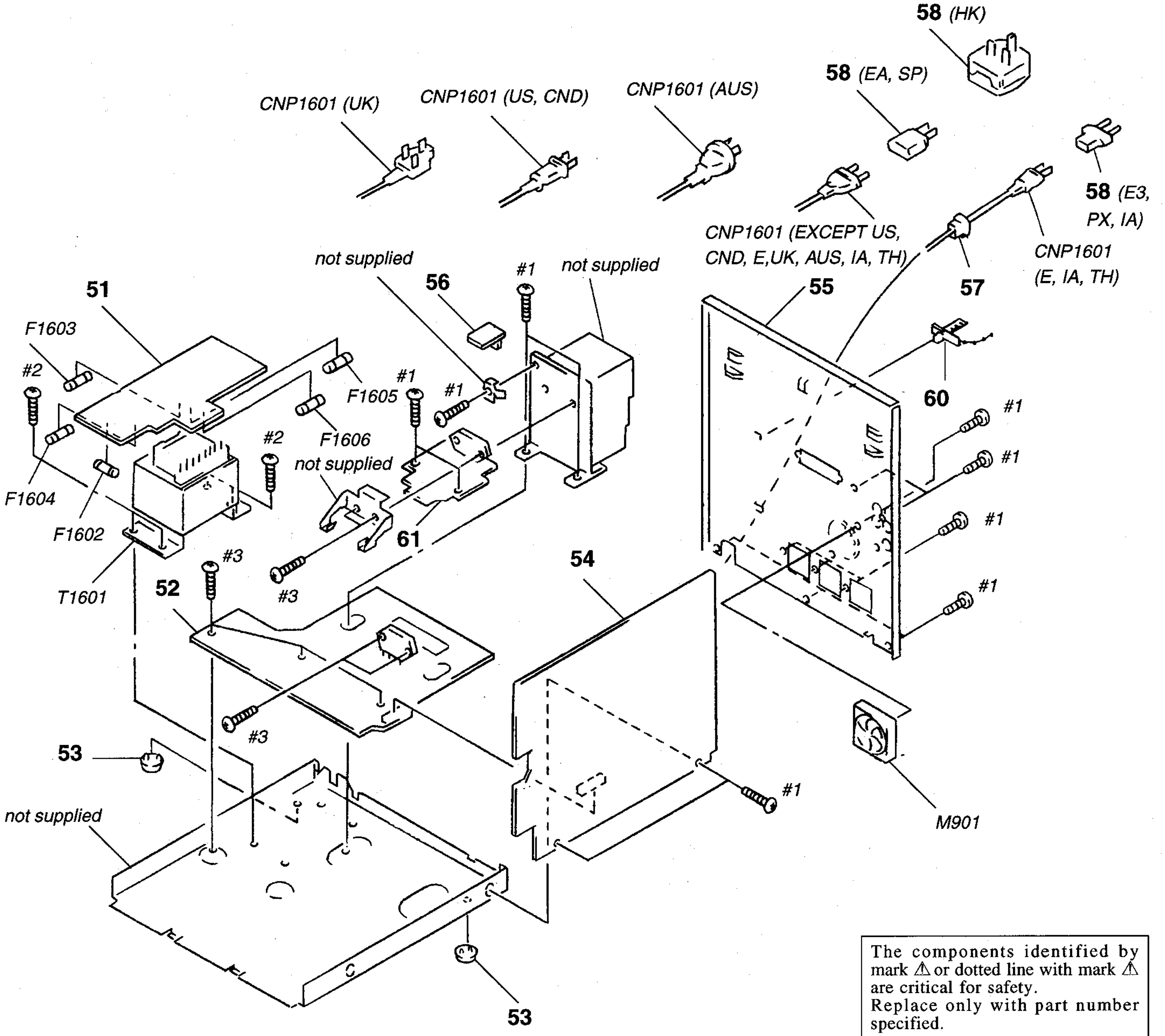
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

7-1. CASE SECTION



Ref. No.	Part No.	Description	Remark
* 1	4-979-851-41	PANEL, LOADING (EA, MY, TH)	
1	4-980-115-01	PANEL, LOADING (US, CND, AEP, UK, G, IT)	
1	4-980-115-11	PANEL, LOADING (E, AUS, SP, HK, IA, AR, PX)	
2	3-363-099-01	SCREW (CASE 3 TP2)	
3	1-751-086-11	WIRE (FLAT TYPE) (13 CORE) (US, CND, E2, AUS, AR, TH)	
3	1-773-012-11	WIRE (FLAT TYPE) (15 CORE) (AEP, UK, E3, PX, G, IT, EA, MY, SP, HK, IA)	
* 4	A-4303-512-A	TCB BOARD (E2, AUS, AR)	
* 4	A-4303-506-A	TCB BOARD (E3, PX, SP, HK, IA)	
* 4	A-4303-510-A	TCB BOARD (US, CND)	
* 4	A-4303-514-A	TCB BOARD (Malaysia product) (AEP)	
* 4	A-4303-518-A	TCB BOARD (EA, MY)	
* 4	A-4303-537-A	TCB BOARD (TH)	
* 4	A-4303-502-A	TCB BOARD (Indonesia product) (AEP, UK)	
* 4	A-4303-503-A	TCB BOARD (G, IT)	
5	1-773-157-11	WIRE (FLAT TYPE) (21 CORE)	
6	1-769-977-11	WIRE (FLAT TYPE) (13 CORE)	
* 7	4-978-748-01	CASE (Except Indonesia product)	
* 7	4-978-748-61	CASE (Indonesia product)	
8	1-765-325-11	WIRE (FLAT TYPE) (11 CORE)	
9	1-776-442-11	WIRE (FLAT TYPE) (19 CORE)	

7-2. BACK PANEL SECTION


58 (HK)
58 (EA, SP)
CNP1601 (UK)
CNP1601 (US, CND)
CNP1601 (AUS)
58 (E3, PX, IA)
CNP1601 (EXCEPT US, CND, E,UK, AUS, IA, TH)
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#1
not supplied
51
56
55
57
F1603
#2
#1
F1605
#1
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#1
F1606
#2
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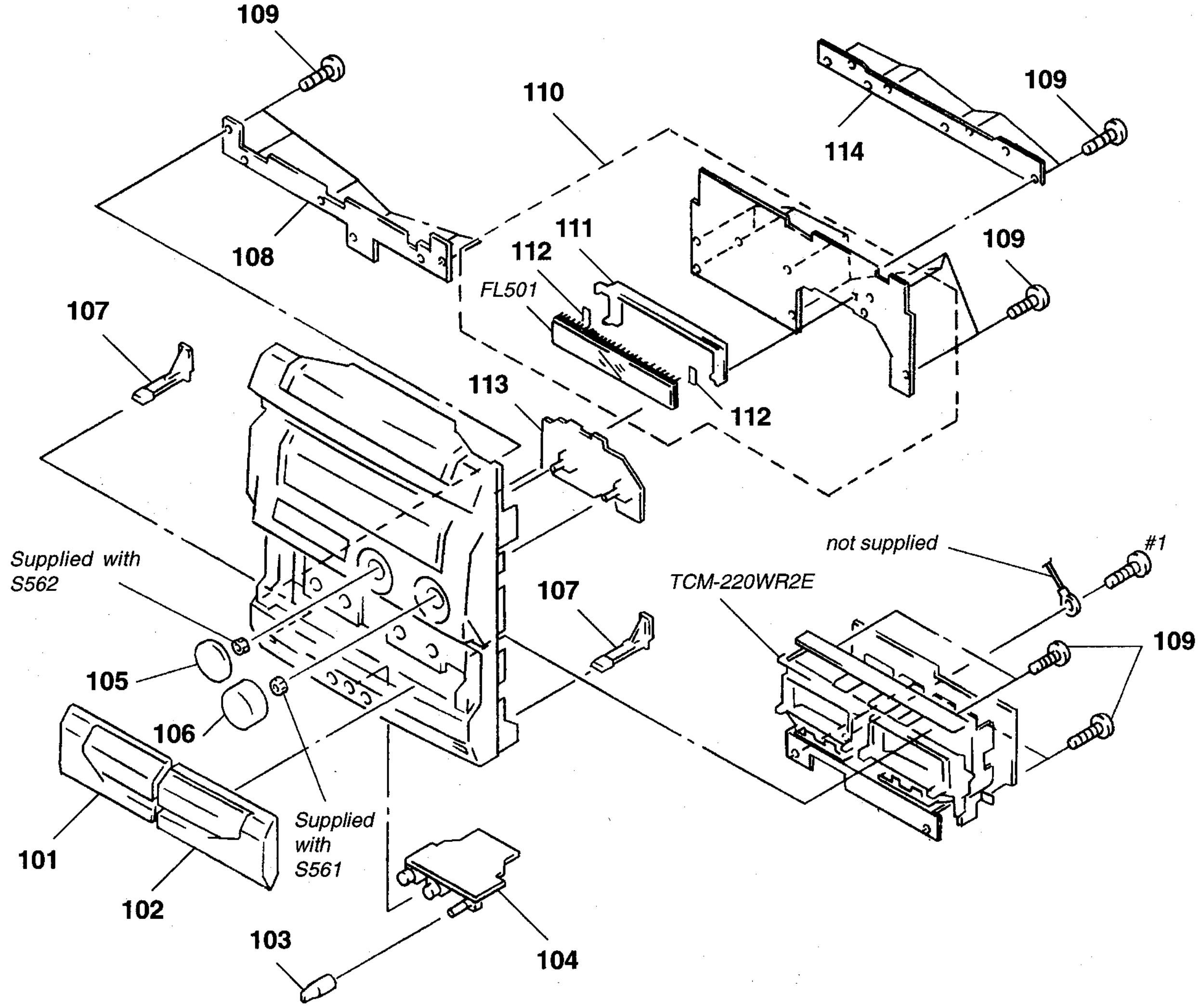
#1
F1604
F1602
61
#1
54
#3
T1601
52
#3
#1
#3
53
not supplied
#1
M901
53

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
* 51	1-659-624-11	TRANSFORMER BOARD	
* 52	A-4389-543-A	POWER AMP BOARD, COMPLETE (AEP, UK, G, IT)	
* 52	A-4389-557-A	POWER AMP BOARD, COMPLETE (US, CND)	
* 52	A-4389-566-A	POWER AMP BOARD, COMPLETE (E, AUS, SP, HK, IA, AR, PX)	
* 52	A-4389-975-A	POWER AMP BOARD, COMPLETE (TH)	
* 52	A-4390-000-A	POWER AMP BOARD, COMPLETE (EA, MY)	
53	4-965-822-01	FOOT	
* 54	A-4389-549-A	MAIN BOARD, COMPLETE (AEP, UK)	
* 54	A-4389-560-A	MAIN BOARD, COMPLETE (US, CND)	
* 54	A-4389-563-A	MAIN BOARD, COMPLETE (E2, AR)	
* 54	A-4389-570-A	MAIN BOARD, COMPLETE (E3, PX, SP, HK, IA)	
* 54	A-4389-980-A	MAIN BOARD, COMPLETE (TH)	
* 54	A-4390-003-A	MAIN BOARD, COMPLETE (EA, MY)	
* 54	A-4390-012-A	MAIN BOARD, COMPLETE (G, IT)	
* 54	A-4390-014-A	MAIN BOARD, COMPLETE (AUS)	
* 55	4-979-583-01	PANEL, BACK (Indonesia product)(AEP)	
* 55	4-979-583-11	PANEL, BACK (UK)	
* 55	4-979-583-21	PANEL, BACK (G)	
* 55	4-979-583-31	PANEL, BACK (IT)	
* 55	4-979-583-41	PANEL, BACK (US)	
* 55	4-979-583-51	PANEL, BACK (CND)	
* 55	4-979-583-61	PANEL, BACK (Malaysia product) (AEP)	
* 55	4-979-584-01	PANEL, BACK (E, IA, PX)	
* 55	4-979-584-11	PANEL, BACK (EA)	
* 55	4-979-584-21	PANEL, BACK (AUS)	
* 55	4-979-584-51	PANEL, BACK (SP)	
* 55	4-979-584-61	PANEL, BACK (AR)	
* 55	4-979-584-71	PANEL, BACK (HK)	
* 55	4-979-584-81	PANEL, BACK (MY)	
* 55	4-979-584-91	PANEL, BACK (TH)	
* 56	1-659-623-11	SENSOR (FAN) BOARD	
57	3-703-244-00	BUSHING (FBS001), CORD (EXCEPT E, IA, TH, PX)	
57	3-703-571-11	BUSHING (S) (4516), CORD (TH)	
57	4-966-266-01	BUSHING (S) (FBS002), CORD (E, IA, PX)	
⚠58	1-569-007-11	ADAPTER, CONVERSION 2P (E3, PX, IA)	
⚠58	1-569-008-11	ADAPTER, CONVERSION 2P (EA, SP)	

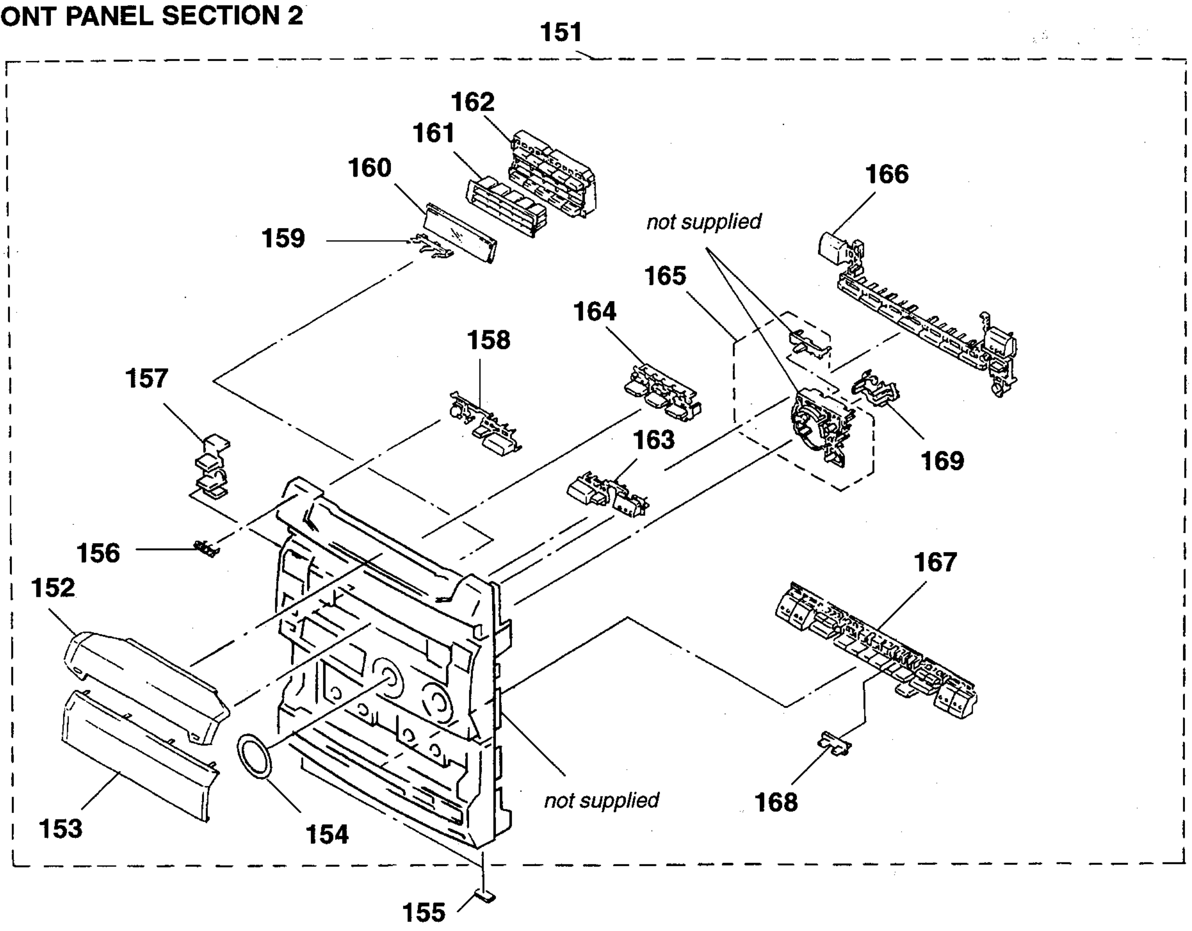
Ref. No.	Part No.	Description	Remark
⚠58	1-770-019-11	ADAPTOR, CONVERSION PLUG 3P (HK)	
60	4-956-370-12	BAND, PLUG FIXED (UK, AUS, HK)	
* 61	A-4389-546-A	SURROUND AMPLIFIER BOARD, COMPLETE (AEP, UK, G, IT)	
* 61	A-4389-568-A	SURROUND AMPLIFIER BOARD, COMPLETE (US, CND, E, AUS, SP, HK, IA, AR, PX)	
* 61	A-4389-978-A	SURROUND AMPLIFIER BOARD, COMPLETE (TH)	
* 61	A-4390-002-A	SURROUND AMPLIFIER BOARD, COMPLETE (EA, MY)	
⚠CNP1601	1-575-651-11	CORD, POWER (AEP, G, IT, EA, MY, SP, HK, AR)	
⚠CNP1601	1-575-653-11	CORD, POWER(E, IA, PX)	
⚠CNP1601	1-690-608-11	CORD, POWER(AUS)	
⚠CNP1601	1-690-609-21	CORD, POWER(US, CND)	
⚠CNP1601	1-751-326-31	CORD, POWER (TH)	
⚠CNP1601	1-751-520-21	CORD, POWER (UK)	
⚠F1602	1-532-465-31	FUSE, TIME-LAG (3.15A 250V) (E, EA, SP, HK, IA, AR, PX)	
⚠F1603	1-532-506-31	FUSE, TIME-LAG (6.3A 250V) (EXCEPT US, CND)	
⚠F1603	1-533-310-11	FUSE, GLASS CYLINDRICAL (DIA.5) (6.3A 125V) (US, CND)	
⚠F1604	1-532-506-31	FUSE, TIME-LAG (6.3A 250V) (EXCEPT US, CND)	
⚠F1604	1-533-310-11	FUSE, GLASS CYLINDRICAL (DIA.5) (6.3A 125V) (US, CND)	
⚠F1605	1-532-465-31	FUSE, TIME-LAG (3.15A 250V) (EXCEPT US, CND)	
⚠F1605	1-533-419-11	FUSE, GLASS CYLINDRICAL (DIA.5) (4A 125V) (US, CND)	
⚠F1606	1-532-465-31	FUSE, TIME-LAG (3.15A 250V) (EXCEPT US, CND)	
⚠F1606	1-533-419-11	FUSE, GLASS CYLINDRICAL (DIA.5) (4A 125V) (US, CND)	
M901	1-698-659-11	FAN, DC	
⚠T1601	1-429-530-11	TRANSFORMER, POWER (AEP, UK, G, IT)	
⚠T1601	1-429-531-11	TRANSFORMER, POWER (E, AUS, SP, HK, IA, AR,PX)	
⚠T1601	1-429-531-21	TRANSFORMER, POWER (EA, MY, TH)	
⚠T1601	1-429-532-11	TRANSFORMER, POWER (US, CND)	

7-3. FRONT PANEL SECTION 1



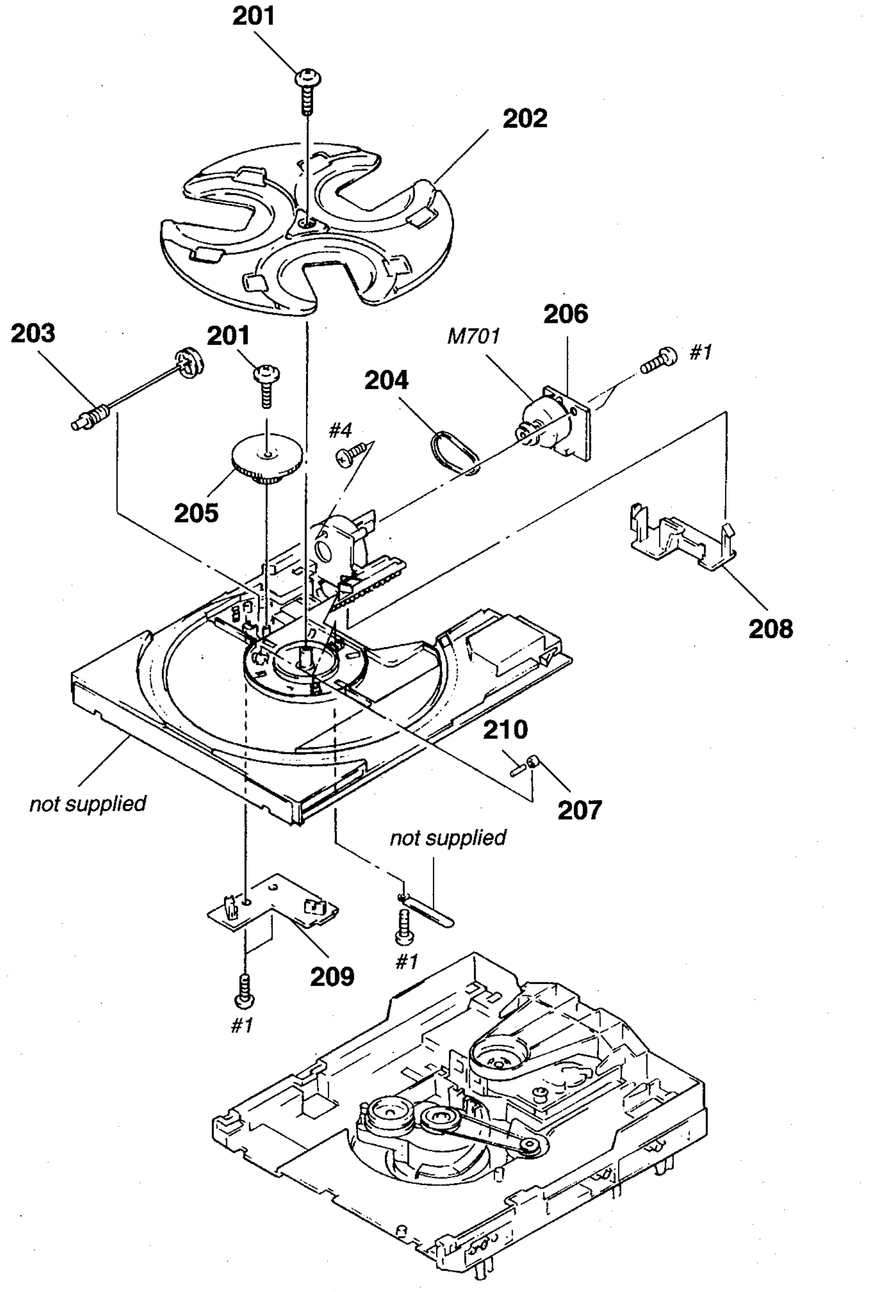
Ref. No.	Part No.	Description	Remark
101	X-4946-661-1	LID (A) ASSY, CASSETTE (Except Indonesia product)	
101	X-4946-787-1	LID (A) ASSY, CASSETTE (Indonesia product)	
102	X-4946-662-1	LID (B) ASSY, CASSETTE (Except Indonesia product)	
102	X-4946-788-1	LID (B) ASSY, CASSETTE (Indonesia product)	
103	4-973-644-01	KNOB (MIC)	
* 104	A-4389-542-A	HP/MIC BOARD, COMPLETE (Indonesia product)	
* 104	A-4390-713-A	HP/MIC BOARD, COMPLETE (Malaysia product)	
* 104	A-4390-714-A	HP/MIC BOARD, COMPLETE (Thailand product)	
105	4-978-732-01	KNOB, JOG (Except Indonesia product)	
105	4-978-732-11	KNOB, JOG (Indonesia product)	
106	4-978-733-01	KNOB, VOL (Except Indonesia product)	
106	4-978-733-11	KNOB, VOL (Indonesia product)	
107	4-978-731-01	BUTTON, EJECT (Except Indonesia product)	
107	4-978-731-11	BUTTON, EJECT (Indonesia product)	
* 108	A-4389-030-A	TC-SW BOARD, COMPLETE (Malaysia product)	
* 108	A-4389-363-A	TC-SW BOARD, COMPLETE (Thailand product)	
* 108	A-4389-541-A	TC-SW BOARD, COMPLETE (Indonesia product)	
109	4-951-620-01	SCREW (2.6X8), +BVTP	
* 110	A-4389-027-A	PANEL BOARD, COMPLETE (EA, MY)	
* 110	A-4389-360-A	PANEL BOARD, COMPLETE (TH)	
* 110	A-4389-538-A	PANEL BOARD, COMPLETE (AEP, UK, G, IT)	
* 110	A-4389-556-A	PANEL BOARD, COMPLETE (US, CND)	
* 110	A-4389-562-A	PANEL BOARD, COMPLETE (E2, AR)	
* 110	A-4389-565-A	PANEL BOARD, COMPLETE (E3, PX, AUS, SP, HK, IA)	
111	4-971-014-11	HOLDER, FL TUBE	
* 112	4-932-810-11	CUSHION (FL)	
* 113	A-4389-028-A	JOG BOARD, COMPLETE (Malaysia product)	
* 113	A-4389-361-A	JOG BOARD, COMPLETE (Thailand product)	
* 113	A-4389-539-A	JOG BOARD, COMPLETE (Indonesia product)	
* 114	A-4389-029-A	CD-SW BOARD, COMPLETE (Malaysia product)	
* 114	A-4389-362-A	CD-SW BOARD, COMPLETE (Thailand product)	
* 114	A-4389-540-A	CD-SW BOARD, COMPLETE (Indonesia product)	
FL501	1-517-483-11	INDICATOR TUBE, FLUORESCENT	

7-4. FRONT PANEL SECTION 2



Ref. No.	Part No.	Description	Remark
151	X-4946-781-1	PANEL ASSY, FRONT (Indonesia product) (AEP, UK, G, IT)	
151	X-4946-791-1	PANEL ASSY, FRONT (US, CND, E, AUS, SP, HK, IA, AR, PX)	
151	X-4947-008-1	PANEL ASSY, FRONT (Malaysia product) (AEP)	
151	X-4947-009-1	PANEL ASSY, FRONT (EA, MY, TH)	
152	4-978-715-01	WINDOW, 3-CD (Except Indonesia product)	
152	4-978-715-11	WINDOW, 3-CD (Indonesia product)	
153	4-978-716-01	WINDOW, FL (Except Indonesia product)	
153	4-978-716-11	WINDOW, FL (Indonesia product)	
154	4-978-745-01	PLATE, ORNAMENTAL, JOG (Except Indonesia product)	
154	4-978-745-31	PLATE, ORNAMENTAL, JOG (Indonesia product)	
155	4-930-336-61	FOOT (FELT)	
156	4-962-708-11	EMBLEM (4-A), SONY (Except Indonesia product)	
156	4-962-708-21	EMBLEM (4-A), SONY (Indonesia product)	
157	4-978-725-01	BUTTON, DSP (Except Indonesia product)	
157	4-978-725-11	BUTTON, DSP (Indonesia product)	
158	4-978-723-01	BUTTON, POWER (Except Indonesia product)	
158	4-978-723-21	BUTTON, POWER (Indonesia product)	
159	4-978-739-01	INDICATOR, CLIP (Except Indonesia product)	
159	4-978-739-11	INDICATOR, CLIP (Indonesia product)	
160	4-978-744-01	PLATE, ORNAMENTAL, MULTI (Malaysia product) (AEP)	
160	4-978-744-11	PLATE, ORNAMENTAL, MULTI (EA, MY, TH)	
160	4-978-744-51	PLATE, ORNAMENTAL, MULTI (Indonesia product) (AEP, UK, G, IT)	
160	4-978-744-61	PLATE, ORNAMENTAL, MULTI (US, CND, E, AUS, SP, HK, IA, AR, PX)	
161	4-978-742-01	HOLDER, MULTI LED (Except Indonesia product)	
161	4-978-742-11	HOLDER, MULTI LED (Indonesia product)	
162	4-978-728-01	BUTTON, MULTI (Except Indonesia product)	
162	4-978-728-11	BUTTON, MULTI (Indonesia product)	
163	X-4946-698-1	BUTTON (CD-PLAY) ASSY (Except Indonesia product)	
163	X-4946-782-1	BUTTON (CD-PLAY) ASSY (Indonesia product)	
164	X-4946-703-1	BUTTON (3-CD) ASSY (Except Indonesia product)	
164	X-4946-783-1	BUTTON (3-CD) ASSY (Indonesia product)	
165	X-4946-704-1	BUTTON (ENTER/NEXT) ASSY (Except Indonesia product)	
165	X-4946-785-1	BUTTON (ENTER/NEXT) ASSY (Indonesia product)	
166	X-4946-699-1	BUTTON (T/B) ASSY (Except Indonesia product)	
166	X-4946-784-1	BUTTON (T/B) ASSY (Indonesia product)	
167	X-4946-700-1	BUTTON (TC-PLAY) ASSY (Except Indonesia product)	
167	X-4946-786-1	BUTTON (TC-PLAY) ASSY (Indonesia product)	
168	4-978-736-01	INDICATOR, REC (Except Indonesia product)	
168	4-978-736-11	INDICATOR, REC (Indonesia product)	
169	4-978-741-01	INDICATOR, JOG-B (Except Indonesia product)	
169	4-978-741-11	INDICATOR, JOG-B (Indonesia product)	

7-5. CD MECHANISM SECTION 1
(CDM38-5BD19)



201
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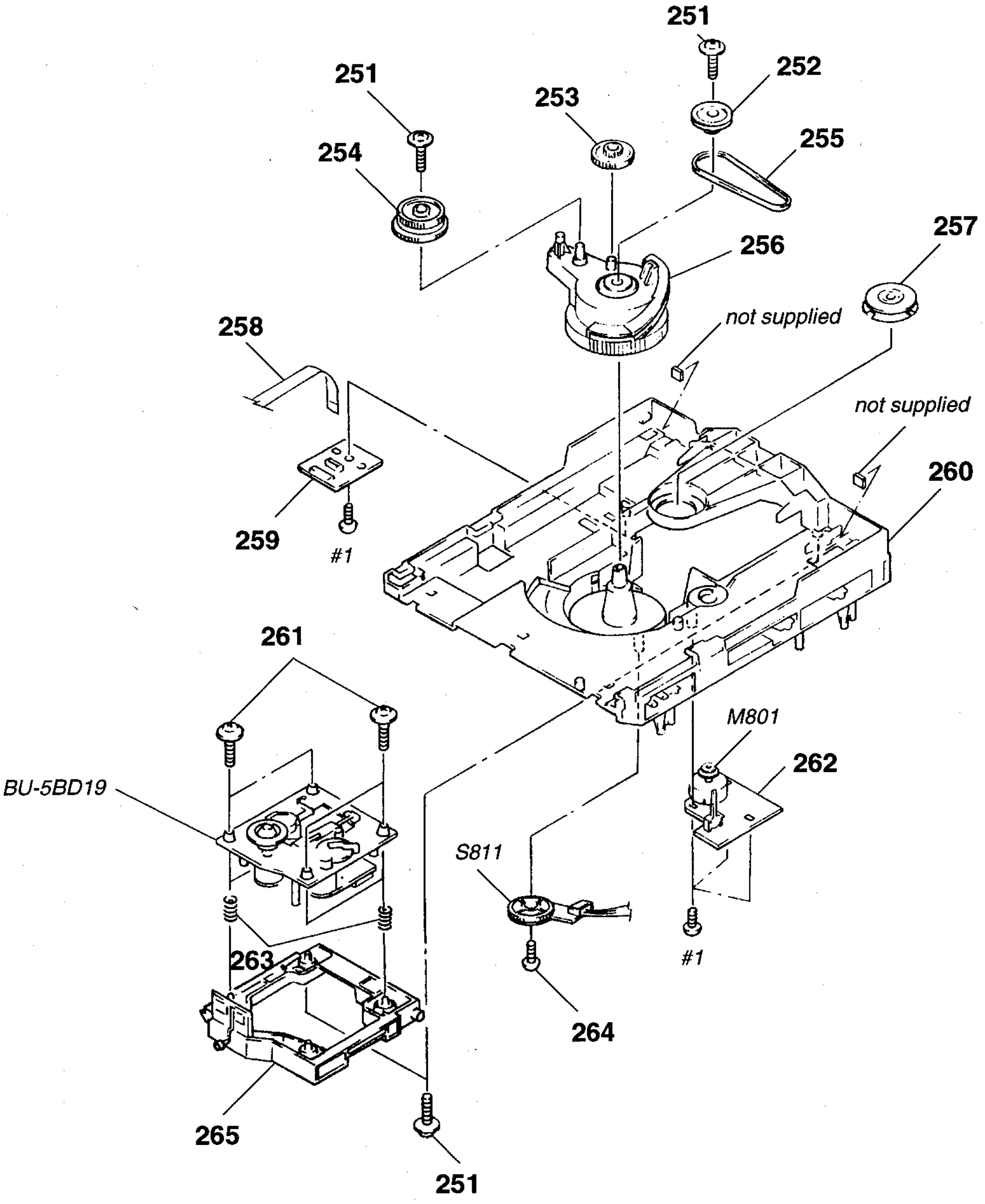
201
206
M701
#1
204
#4
205
208
210
not supplied
207
not supplied
209
#1
#1

Ref. No.	Part No.	Description	Remark
201	4-917-583-21	BRACKET, YOKE (Except Indonesia product)	
201	4-917-583-71	BRACKET, YOKE (Indonesia product)	
202	4-977-945-01	TRAY (TURN)	
203	X-4946-665-1	SHAFT ASSY, WORM	
204	4-977-943-01	BELT (TURN) (1.2)	
205	4-977-956-01	WHEEL, WORM	
* 206	1-658-577-11	MOTOR (TURN) BOARD	
207	X-4924-457-1	ROLLER ASSY	
208	4-977-941-01	BEARING (WORM)	
* 209	1-658-576-11	SENSOR BOARD	
210	4-934-376-01	SHAFT (ROLLER)	
M701	A-4672-004-A	MOTOR ASSY (TURN)	

7-6. CD MECHANISM SECTION 2
(CDM38-5BD19)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not supplied
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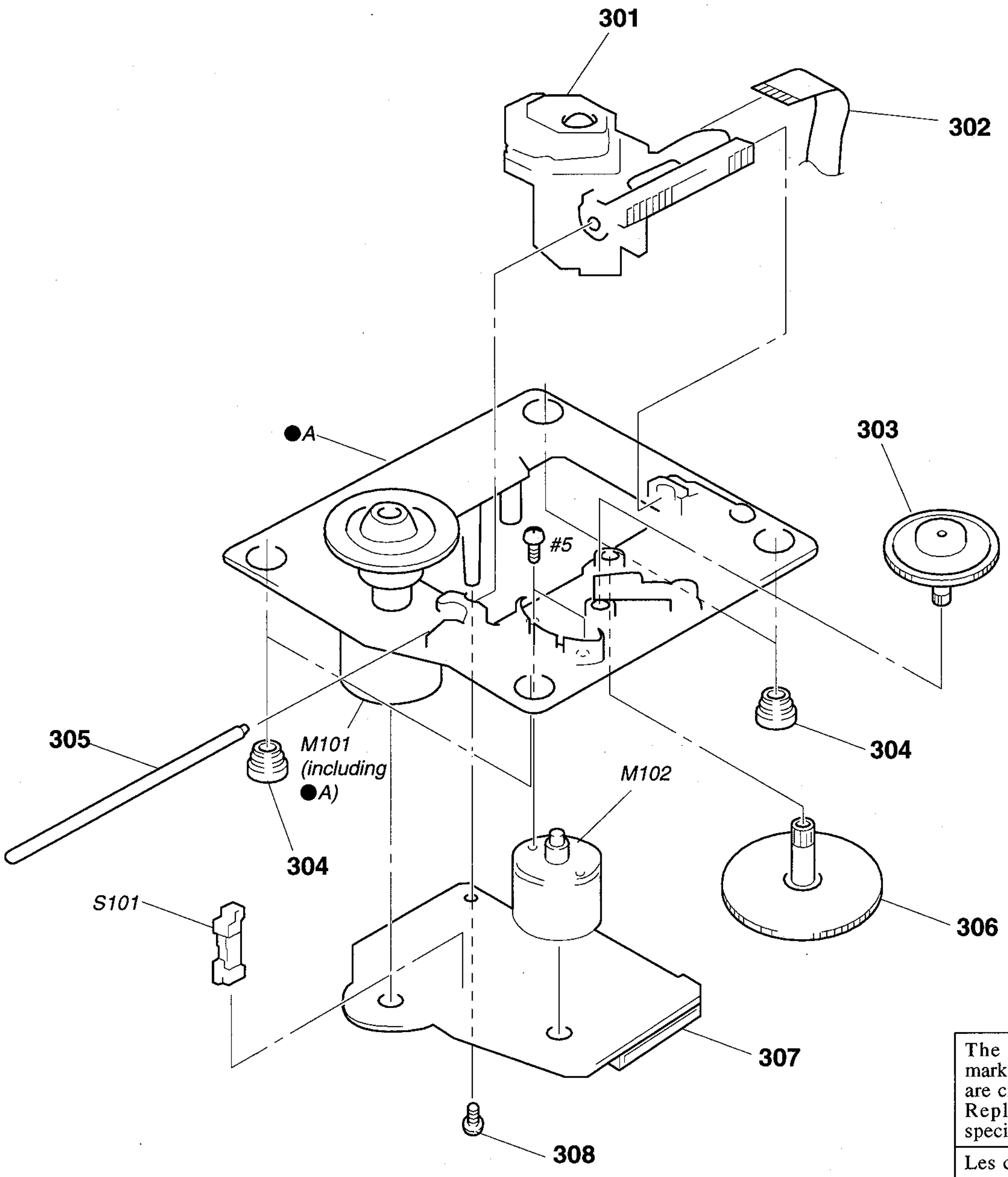
#1
261
M801
262
BU-5BD19
S811
263
#1
264
265
251

Ref. No.	Part No.	Description	Remark
251	4-917-583-21	BRACKET, YOKE (Except Indonesia product)	
251	4-917-583-71	BRACKET, YOKE (Indonesia product)	
252	4-977-954-01	PULLEY (SL)	
253	4-977-953-01	GEAR (SL-A)	
254	4-977-955-01	GEAR (SL-B)	
255	4-977-942-01	BELT (SL) (1.4)	
256	X-4946-667-1	CAM ASSY, BU	
257	1-452-538-11	MAGNET	
258	1-776-042-11	WIRE (FLAT TYPE) (8 CORE)	
* 259	1-658-575-11	CONNECTOR BOARD	
* 260	X-4946-668-1	CHASSIS (CDM) ASSY	
261	4-933-134-01	SCREW (+PTPWH M2.6X6)	
* 262	1-658-578-11	MOTOR (SLIDE) BOARD	
263	4-982-447-01	SPRING (BU), COMPRESSION	
264	4-951-620-41	SCREW (2.6), +BVTP	
* 265	X-4946-666-1	HOLDER (BU) ASSY	
M801	A-4672-004-A	MOTOR ASSY (SLED)	
S811	1-473-335-11	ENCODER, ROTARY (BU, TRAY ADDRESS DET)	

7-7. BASE UNIT SECTION (BU-5BD19)



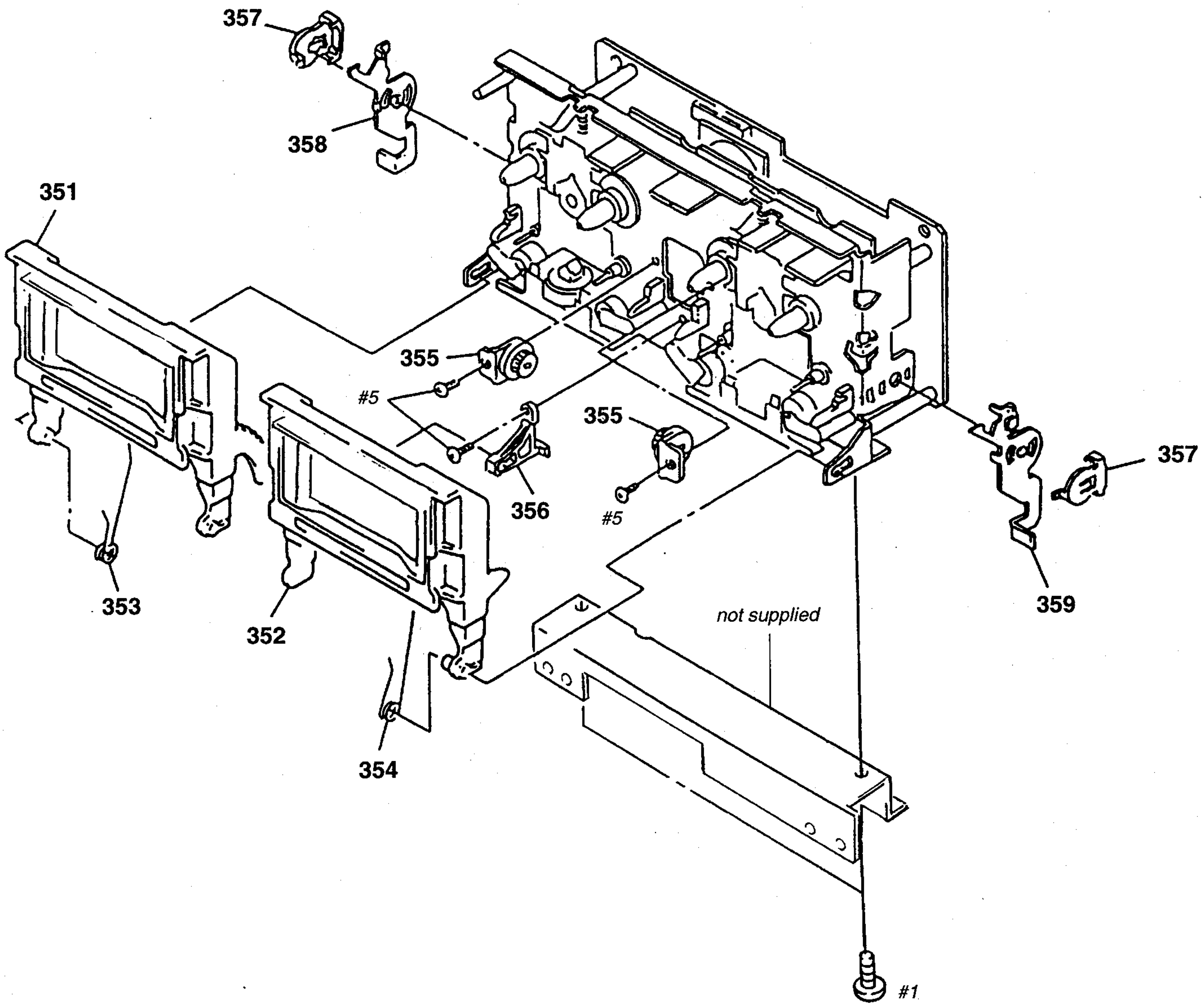
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
⚠301	8-848-367-11	OPTICAL PICK UP KSS-213BA/F-NP	
302	1-769-069-11	WIRE (FLAT TYPE) (16 CORE)	
303	4-917-567-01	GEAR (M)	
304	4-951-940-01	INSULATOR (BU)	
305	4-917-565-01	SHAFT, SLED	
306	4-917-564-01	GEAR (P), FLATNESS	

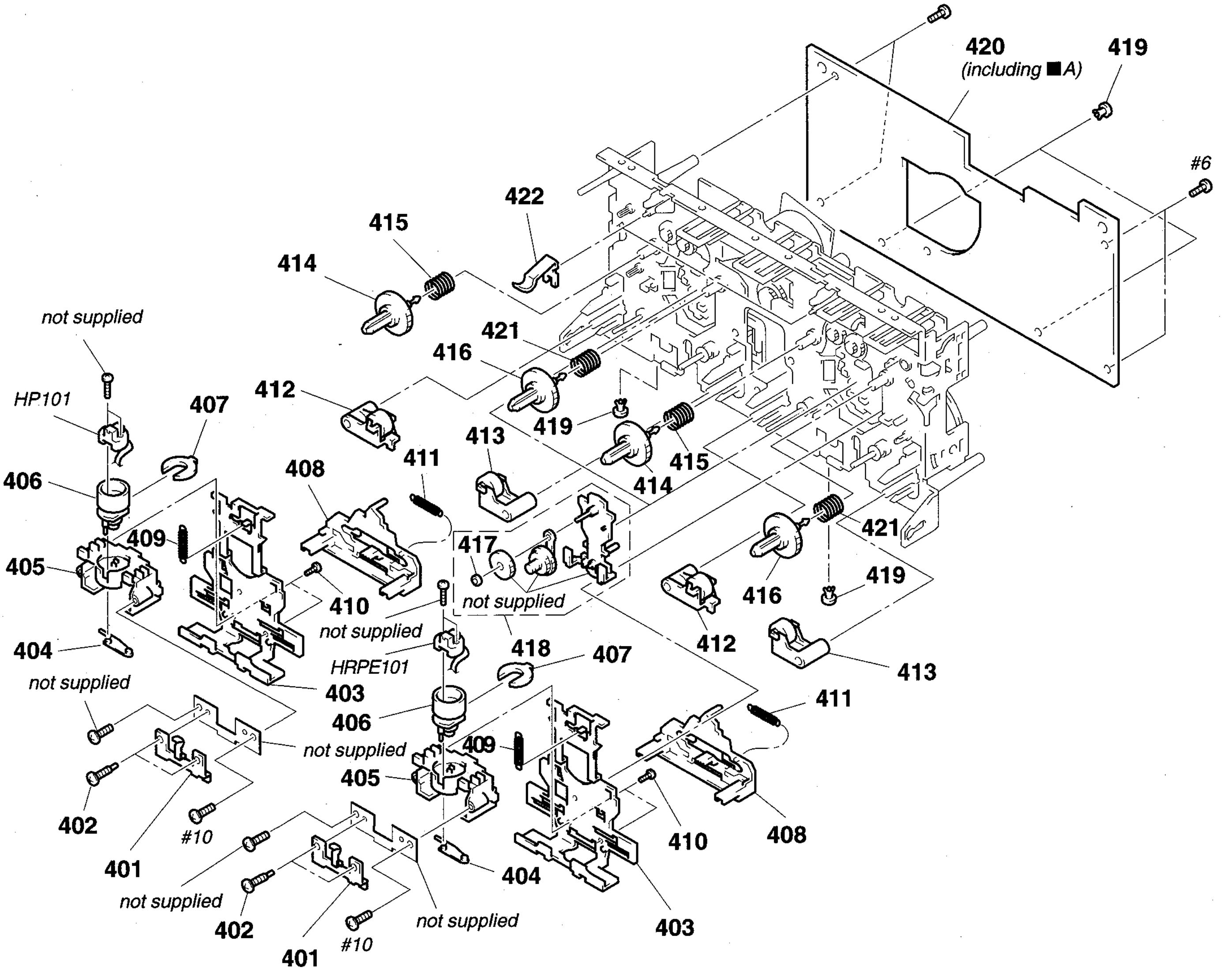
Ref. No.	Part No.	Description	Remark
* 307	A-4673-402-A	BD BOARD, COMPLETE	
308	4-951-620-01	SCREW (2.6X8), +BVTP	
M101	X-4917-523-4	MOTOR ASSY (SPINDLE)	
M102	X-4917-504-1	MOTOR ASSY (SLED)	
S101	1-572-085-11	SWITCH, LEAF (LIMIT)	

7-8. TC MECHANISM SECTION 1
(TCM-220WR2E)



Ref. No.	Part No.	Description	Remark
351	X-4946-663-1	HOLDER (L) ASSY, CASSETTE (Except Indonesia product)	
351	X-4946-789-1	HOLDER (L) ASSY, CASSETTE (Indonesia product)	
352	X-4946-664-1	HOLDER (R) ASSY, CASSETTE (Except Indonesia product)	
352	X-4946-790-1	HOLDER (R) ASSY, CASSETTE (Indonesia product)	
353	4-969-231-11	SPRING (L), TORSION	
354	4-959-232-11	SPRING (R), TORSION	
355	3-354-963-01	DAMPER	
* 356	4-980-439-01	FULCRUM, HOLDER	
357	3-354-957-01	JOINT (LOCK LEVER)	
* 358	3-354-953-01	LEVER (LOCK LEVER L)	
* 359	3-354-954-01	LEVER (LOCK LEVER R)	

7-9. TC MECHANISM SECTION 2 (TCM-220WR2E)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(including ■A)
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#6
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HP101
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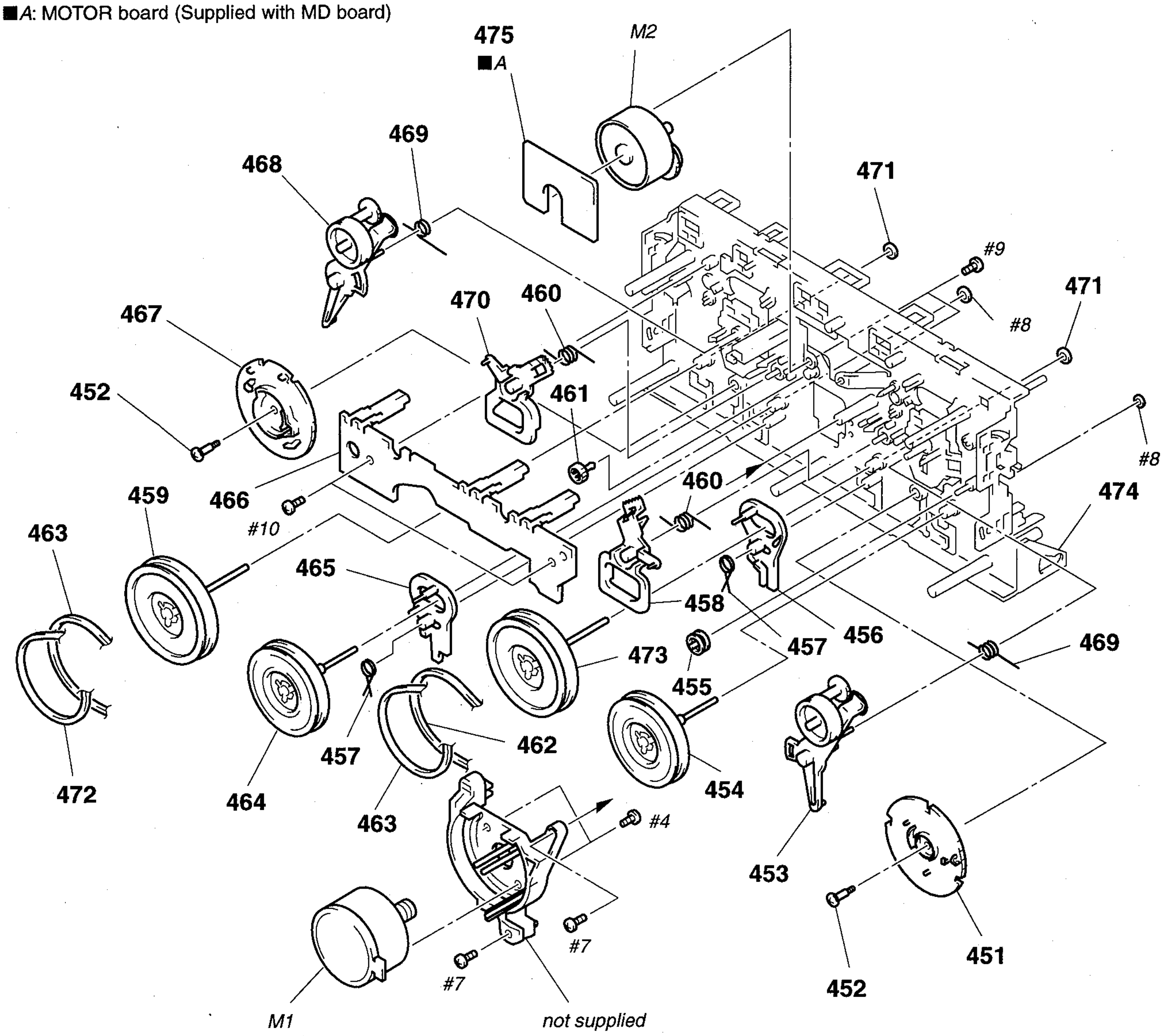
421
417
405
416
419
410
not supplied
not supplied
412
404
418
407
not supplied
HRPE101
413
403
411
406
not supplied
409
405
402
401
#10
410
408
404
401
not supplied
402
not supplied
401
#10
403

Ref. No.	Part No.	Description	Remark
401	3-908-560-01	SPRING, AZIMUTH ADJUSTMENT	
402	3-919-684-01	SCREW, AZIMUTH ADJUSTMENT	
* 403	X-3367-584-2	SLIDER (HEAD) ASSY	
404	3-908-556-01	SPRING, HEAD TOGGLE	
405	3-908-558-02	FITTING BLOCK, HEAD	
406	3-908-557-02	ROTARY BLOCK, HEAD	
* 407	3-908-559-01	STOPPER, AZIMUTH	
408	3-908-555-01	SLIDER (REV SLIDER)	
409	3-917-143-11	SPRING, TENSION	
410	3-388-848-01	SCREW (P2X6) (B TIGHT)	
411	3-911-113-01	SPRING, TENSION	
412	X-3370-643-1	PINCH LEVER (REV) ASSY	
413	X-3367-588-1	PINCH LEVER (FWD) ASSY	
414	3-908-613-01	GEAR (S), REEL	
415	3-917-141-01	SPRING, COMPRESSION	
416	X-3371-305-1	REEL (T) ASSY	
417	3-669-465-01	WASHER (1.5), STOPPER	
418	X-3370-173-1	TU ASSY	
419	3-911-116-21	RIVET, PUSH	
* 420	A-2007-435-A	MD BOARD, COMPLETE	
421	3-917-142-01	SPRING, COMPRESSION	
422	3-930-972-01	DETENT, HALF	
HP101	1-500-093-11	HEAD, MAGNETIC (PLAYBACK)	
HRPE101	1-500-094-11	HEAD, MAGNETIC (REC/PB/ERASE)	

7-10. TC MECHANISM SECTION 3 (TCM-220WR2E)

■*A*: MOTOR board (Supplied with MD board)


475
■A
M2
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#9
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#10
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#4
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#7
451
#7
452
M1
not supplied

Ref. No.	Part No.	Description	Remark
451	3-908-597-01	CAM (A)	
452	3-908-608-11	SCREW, STEP	
453	X-3367-590-2	ARM (A) ASSY, FR	
454	X-3370-169-1	FLYWHEEL (AR) ASSY	
455	3-928-047-01	PULLEY, TENSION	
456	3-908-599-01	LEVER (REV-A)	
457	3-908-601-01	SPRING (REV LEVER), TORSION	
458	3-908-603-01	LEVER (TRIGGER A)	
459	X-3370-170-1	FLYWHEEL (BF) ASSY	
460	3-908-605-01	SPRING (TRIGGER), TORSION	
461	3-908-609-01	GEAR, TRIGGER	
462	3-913-845-11	BELT (A)	
463	3-913-846-11	BELT (FR)	
464	X-3370-171-1	FLYWHEEL (BR) ASSY	
465	3-908-600-01	LEVER (REV-B)	
466	1-650-669-11	LEAF SWITCH BOARD	
467	3-908-598-01	CAM (B)	
468	X-3369-849-2	ARM (B) ASSY, FR	
469	3-914-111-01	SPRING (FR), TORSION	
470	3-908-604-01	LEVER (TRIGGER B)	
471	3-911-115-01	WASHER, STOPPER	
472	3-917-176-11	BELT (B)	
473	X-3370-172-1	FLYWHEEL (AF) ASSY	
474	X-3371-441-1	CHASSIS ASSY, MECHANICAL	
* 475	A-2007-435-A	MD BOARD, COMPLETE	
M1	X-3371-223-1	MOTOR ASSY (CAPSTAN)	
M2	A-2004-410-A	MOTOR ASSY (TRIGGER)	

SECTION 8
ELECTRICAL PARTS LIST

Note:

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- RESISTORS
  All resistors are in ohms
  METAL: Metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F : nonflammable
- SEMICONDUCTORS
  In each case, u: μ , for example:
  uA...: μ A..., uPA...: μ PA..., uPB...: μ PB..., uPC...: μ PC..., uPD...: μ PD...

- CAPACITORS
  uF : μ F
- COILS
  uH : μ H
- Abbreviation
  CND: Canadian model
  G: German model
  IT: Italian model
  EA: Saudi Arabia model
  HK: Hong Kong model
  SP: Singapore model
  MY: Malaysia model
  AUS: Australian model
  AR: Argentine model
  TH: Thailand model
  IA: Indonesian model
  E2: Without SW tuner model
  E3: With SW tuner model

Ref. No.	Part No.	Description			Remark
*	A-4673-402-A	BD BOARD, COMPLETE			
		*******************			
		< CAPACITOR >			
C101	1-126-607-11	ELECT CHIP	47uF	20%	4V
C102	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C103	1-164-346-11	CERAMIC CHIP	1uF		16V
C105	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C106	1-164-695-11	CERAMIC CHIP	0.0022uF	5%	50V
C107	1-164-695-11	CERAMIC CHIP	0.0022uF	5%	50V
C108	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C109	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C110	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C111	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C112	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C113	1-164-695-11	CERAMIC CHIP	0.0022uF	5%	50V
C114	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C115	1-126-607-11	ELECT CHIP	47uF	20%	4V
C116	1-163-016-00	CERAMIC CHIP	0.0039uF	10%	50V
C117	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C118	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C119	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C120	1-135-201-11	TANTALUM CHIP	10uF	20%	4V
C121	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C122	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C123	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C124	1-126-607-11	ELECT CHIP	47uF	20%	4V
C125	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C126	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C127	1-164-695-11	CERAMIC CHIP	0.0022uF	5%	50V
C128	1-163-135-00	CERAMIC CHIP	560PF	5%	50V
C129	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C130	1-164-336-11	CERAMIC CHIP	0.33uF		25V
C131	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C132	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C133	1-163-145-00	CERAMIC CHIP	0.0015uF	5%	50V
C134	1-164-346-11	CERAMIC CHIP	1uF		16V
C135	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C136	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C137	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C139	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C140	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C141	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C142	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C145	1-135-201-11	TANTALUM CHIP	10uF	20%	4V
C146	1-135-201-11	TANTALUM CHIP	10uF	20%	4V
C147	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C148	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C149	1-164-346-11	CERAMIC CHIP	1uF		16V
C153	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C154	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
		< CONNECTOR >			
CNU101	1-770-014-11	CONNECTOR, FFC/FPC 16P			
CNU102	1-770-013-11	CONNECTOR, FFC/FPC 19P			
		< IC >			
IC101	8-752-069-56	IC CXA1782BQ			
IC102	8-759-291-06	IC BA6397FP			
IC103	8-752-372-94	IC CXD2507AQ			
IC104	8-759-185-29	IC PCM1710U-B			
		< TRANSISTOR >			
Q101	8-729-010-08	TRANSISTOR MSB710-R			
Q102	8-729-424-08	TRANSISTOR UN2111			
Q103	8-729-421-22	TRANSISTOR UN2211			
		< RESISTOR >			
R102	1-216-001-00	METAL CHIP	10	5%	1/10W
R103	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R104	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R105	1-216-093-00	METAL CHIP	68K	5%	1/10W
R106	1-216-093-00	METAL CHIP	68K	5%	1/10W
R107	1-216-093-00	METAL CHIP	68K	5%	1/10W
R108	1-216-093-00	METAL CHIP	68K	5%	1/10W
R109	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R112	1-216-083-00	METAL CHIP	27K	5%	1/10W
R113	1-216-083-00	METAL CHIP	27K	5%	1/10W

Ref. No.	Part No.	Description				Remark
R114	1-216-101-00	METAL CHIP	150K	5%	1/10W	
R115	1-216-101-00	METAL CHIP	150K	5%	1/10W	
R116	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	
R117	1-216-069-00	METAL CHIP	6.8K	5%	1/10W	
R118	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R119	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R120	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R121	1-216-114-00	METAL GLAZE	510K	5%	1/10W	
R122	1-216-097-91	METAL GLAZE	100K	5%	1/10W	
R123	1-216-099-00	METAL CHIP	120K	5%	1/10W	
R124	1-216-091-00	METAL CHIP	56K	5%	1/10W	
R125	1-216-069-00	METAL CHIP	6.8K	5%	1/10W	
R126	1-216-063-91	METAL GLAZE	3.9K	5%	1/10W	
R127	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R128	1-216-105-91	METAL GLAZE	220K	5%	1/10W	
R129	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R130	1-216-079-00	METAL CHIP	18K	5%	1/10W	
R131	1-216-079-00	METAL CHIP	18K	5%	1/10W	
R132	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	
R133	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	
R134	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R135	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R136	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R137	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R138	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R139	1-216-033-00	METAL CHIP	220	5%	1/10W	
R140	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R141	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	
R142	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	
R143	1-216-121-91	METAL GLAZE	1M	5%	1/10W	
R144	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R145	1-216-097-91	METAL GLAZE	100K	5%	1/10W	
R146	1-216-097-91	METAL GLAZE	100K	5%	1/10W	
R147	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R148	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R149	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R150	1-216-037-00	METAL CHIP	330	5%	1/10W	
R151	1-216-037-00	METAL CHIP	330	5%	1/10W	
R152	1-216-037-00	METAL CHIP	330	5%	1/10W	
R153	1-216-082-00	METAL GLAZE	24K	5%	1/10W	
R154	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R156	1-216-085-00	METAL CHIP	33K	5%	1/10W	
R157	1-216-069-00	METAL CHIP	6.8K	5%	1/10W	
R158	1-216-001-00	METAL CHIP	10	5%	1/10W	
		< VARIABLE RESISTOR >				
RV101	1-241-396-11	RES, ADJ, METAL GLAZE 22K				
RV102	1-241-396-11	RES, ADJ, METAL GLAZE 22K				
RV103	1-241-396-11	RES, ADJ, METAL GLAZE 22K				

Ref. No.	Part No.	Description	Remark
		< SWITCH >	
S101	1-572-085-11	SWITCH, LEAF (LIMIT)	
		< VIBRATOR >	
X101	1-579-280-11	VIBRATOR, CRYSTAL (16.9344MHz)	

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* A-4389-029-A CD-SW BOARD, COMPLETE (Malaysia product)

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* A-4389-362-A CD-SW BOARD, COMPLETE (Thailand product)

****

* A-4389-540-A CD-SW BOARD, COMPLETE (Indonesia product)

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Ref. No.	Part No.	Description				Remark
		< CONNECTOR >				
* CN505	1-568-947-11	PIN, CONNECTOR 9P				
		< DIODE >				
D516	8-719-056-13	DIODE SML79423C-TP15 (DISC 1)				
D517	8-719-056-13	DIODE SML79423C-TP15 (DISC 1)				
D518	8-719-056-13	DIODE SML79423C-TP15 (DISC 2)				
D519	8-719-056-13	DIODE SML79423C-TP15 (DISC 2)				
D520	8-719-056-13	DIODE SML79423C-TP15 (DISC 3)				
D521	8-719-056-13	DIODE SML79423C-TP15 (DISC 3)				
D522	8-719-056-13	DIODE SML79423C-TP15 (▷II)				
		< TRANSISTOR >				
Q510	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q511	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q512	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q513	8-729-119-76	TRANSISTOR 2SA1175-HFE				
		< RESISTOR >				
R518	1-249-401-11	CARBON	47	5%	1/4W	F
R519	1-249-403-11	CARBON	68	5%	1/4W	F
R520	1-247-807-31	CARBON	100	5%	1/4W	
R521	1-249-407-11	CARBON	150	5%	1/4W	F
R522	1-249-407-11	CARBON	150	5%	1/4W	F
R523	1-247-815-91	CARBON	220	5%	1/4W	
R524	1-249-411-11	CARBON	330	5%	1/4W	
R525	1-249-413-11	CARBON	470	5%	1/4W	F
R596	1-249-403-11	CARBON	68	5%	1/4W	
R597	1-249-403-11	CARBON	68	5%	1/4W	
R598	1-249-403-11	CARBON	68	5%	1/4W	
R599	1-249-403-11	CARBON	68	5%	1/4W	
R600	1-249-403-11	CARBON	68	5%	1/4W	
R601	1-249-403-11	CARBON	68	5%	1/4W	
R602	1-249-403-11	CARBON	68	5%	1/4W	

CD-SW CONNECTOR HP/MIC JOG

Ref. No.	Part No.	Description				Remark
R603	1-249-403-11	CARBON	68	5%	1/4W	
R604	1-249-403-11	CARBON	68	5%	1/4W	
R605	1-249-403-11	CARBON	68	5%	1/4W	
R606	1-249-403-11	CARBON	68	5%	1/4W	
R607	1-249-403-11	CARBON	68	5%	1/4W	
R608	1-249-403-11	CARBON	68	5%	1/4W	
R609	1-249-403-11	CARBON	68	5%	1/4W	

< SWITCH >

Ref. No.	Part No.	Description	Remark
S500	1-554-303-21	SWITCH, TACTILE (POWER)	
S501	1-554-303-21	SWITCH, TACTILE (LOOP)	
S502	1-554-303-21	SWITCH, TACTILE (DISC SKIP EX-CHANGE)	
S503	1-554-303-21	SWITCH, TACTILE (DISC 1)	
S504	1-554-303-21	SWITCH, TACTILE (DISC 2)	
S505	1-554-303-21	SWITCH, TACTILE (DISC 3)	
S506	1-554-303-21	SWITCH, TACTILE (⏏ OPEN/CLOSE)	
S507	1-554-303-21	SWITCH, TACTILE (■)	
S508	1-554-303-21	SWITCH, TACTILE (▷II)	

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Ref. No.	Part No.	Description	Remark
*	1-658-575-11	CONNECTOR BOARD *****************	

< CONNECTOR >

Ref. No.	Part No.	Description	Remark
* CN701	1-568-946-11	PIN, CONNECTOR 8P	
CN702	1-750-413-11	CONNECTOR, FFC/FPC 8P	

< TRANSISTOR >

Ref. No.	Part No.	Description	Remark
Q701	8-729-900-80	TRANSISTOR DTC114ES	

< RESISTOR >

Ref. No.	Part No.	Description				Remark
R703	1-249-435-11	CARBON	33K	5%	1/4W	
R704	1-249-429-11	CARBON	10K	5%	1/4W	
R705	1-249-417-11	CARBON	1K	5%	1/4W	F

****

Ref. No.	Part No.	Description	Remark
*	A-4389-542-A	HP/MIC BOARD, COMPLETE (Indonesia product) **************************************	
*	A-4390-713-A	HP/MIC BOARD, COMPLETE (Malaysia product) **************************************	
*	A-4390-714-A	HP/MIC BOARD, COMPLETE (Thailand product) **************************************	

< CAPACITOR >

Ref. No.	Part No.	Description				Remark
C670	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C671	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C672	1-164-159-11	CERAMIC	0.1uF		50V	
C673	1-164-159-11	CERAMIC	0.1uF		50V	
C674	1-162-306-11	CERAMIC	0.01uF	30%	16V	
C675	1-124-257-00	ELECT	2.2uF	20%	50V	
C676	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C677	1-162-215-31	CERAMIC	47PF	5%	50V	
C678	1-162-290-31	CERAMIC	470PF	10%	50V	
C679	1-124-465-00	ELECT	0.47uF	20%	50V	
C680	1-162-215-31	CERAMIC	47PF	5%	50V	
C681	1-162-282-31	CERAMIC	100PF	10%	50V	
C684	1-124-261-00	ELECT	10uF	20%	50V	
C686	1-124-261-00	ELECT	10uF	20%	50V	
C687	1-124-465-00	ELECT	0.47uF	20%	50V	

< IC >

Ref. No.	Part No.	Description	Remark
IC670	8-759-634-51	IC M5218AP	

< JACK >

Ref. No.	Part No.	Description	Remark
J670	1-770-226-11	JACK (LARGE TYPE) (PHONES)	
J671	1-770-226-11	JACK (LARGE TYPE) (MIX MIC)	

< RESISTOR >

Ref. No.	Part No.	Description				Remark
R670	1-249-429-11	CARBON	10K	5%	1/4W	
R671	1-249-417-11	CARBON	1K	5%	1/4W	F
R672	1-249-441-11	CARBON	100K	5%	1/4W	
R673	1-249-417-11	CARBON	1K	5%	1/4W	F
R674	1-247-863-91	CARBON	22K	5%	1/4W	
R675	1-249-429-11	CARBON	10K	5%	1/4W	
R676	1-247-881-00	CARBON	120K	5%	1/4W	
R677	1-247-807-31	CARBON	100	5%	1/4W	

< VARIABLE RESISTOR >

Ref. No.	Part No.	Description	Remark
RV670	1-223-983-11	RES, VAR, CARBON 50K (MIC LEVEL)	

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Ref. No.	Part No.	Description	Remark
*	A-4389-028-A	JOG BOARD, COMPLETE (Malaysia product) ***********************************	
*	A-4389-361-A	JOG BOARD, COMPLETE (Thailand product) ***********************************	
*	A-4389-539-A	JOG BOARD, COMPLETE (Indonesia product) ************************************	

< CAPACITOR >

Ref. No.	Part No.	Description				Remark
C524	1-162-306-11	CERAMIC	0.01uF	30%	16V	
C525	1-162-306-11	CERAMIC	0.01uF	30%	16V	
C526	1-164-159-11	CERAMIC	0.1uF		50V	
C527	1-164-159-11	CERAMIC	0.1uF		50V	

< DIODE >

Ref. No.	Part No.	Description	Remark
D508	8-719-058-17	DIODE LNJ401NPYJA (SONIC FORMATION)	
D509	8-719-057-30	DIODE HLMF-K205-2UL (ENTER/NEXT, MULTI JOG STATION)	

Ref. No.	Part No.	Description	Remark
D510	8-719-057-97	DIODE SEL5923A-TP15 (▶▶I, MULTI JOG STATION)	
D511	8-719-057-97	DIODE SEL5923A-TP15 (I◀◀, MULTI JOG STATION)	
D512	8-719-057-97	DIODE SEL5923A-TP15 (MULTI JOG STATION)	
D513	8-719-057-97	DIODE SEL5923A-TP15 (MULTI JOG STATION)	
D514	8-719-057-97	DIODE SEL5923A-TP15 (+, MULTI JOG STATION)	
D515	8-719-057-97	DIODE SEL5923A-TP15 (-, MULTI JOG STATION)	

< TRANSISTOR >

Ref. No.	Part No.	Description	Remark
Q507	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q508	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q509	8-729-119-76	TRANSISTOR 2SA1175-HFE	

< RESISTOR >

Ref. No.	Part No.	Description	Remark
R541	1-249-413-11	CARBON 470 5% 1/4W	F
R542	1-249-415-11	CARBON 680 5% 1/4W	F
R543	1-249-417-11	CARBON 1K 5% 1/4W	F
R544	1-249-419-11	CARBON 1.5K 5% 1/4W	F
R545	1-249-421-11	CARBON 2.2K 5% 1/4W	F
R546	1-249-423-11	CARBON 3.3K 5% 1/4W	F
R588	1-247-807-31	CARBON 100 5% 1/4W	
R589	1-247-815-91	CARBON 220 5% 1/4W	
R590	1-247-807-31	CARBON 100 5% 1/4W	
R591	1-247-807-31	CARBON 100 5% 1/4W	
R592	1-247-807-31	CARBON 100 5% 1/4W	
R593	1-247-807-31	CARBON 100 5% 1/4W	
R594	1-247-807-31	CARBON 100 5% 1/4W	
R595	1-247-807-31	CARBON 100 5% 1/4W	

< SWITCH >

Ref. No.	Part No.	Description	Remark
S524	1-554-303-21	SWITCH, TACTILE (DBFB)	
S526	1-554-303-21	SWITCH, TACTILE (SONIC FORMATION)	
S527	1-554-303-21	SWITCH, TACTILE (FREQUENCY +)	
S528	1-554-303-21	SWITCH, TACTILE (ENTER/NEXT)	
S529	1-554-303-21	SWITCH, TACTILE (FREQUENCY -)	
S561	1-467-869-11	ENCODER, ROTARY (VOLUME)	
S562	1-467-968-11	ENCODER, ROTARY (MULTI JOG STATION)	

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Ref. No.	Part No.	Description	Remark
*	1-650-669-11	LEAF SWITCH BOARD *****************	

< CONNECTOR >

Ref. No.	Part No.	Description	Remark
* CN1001	1-568-854-11	SOCKET, CONNECTOR 11P	

< PHOTO REFLECTOR >

Ref. No.	Part No.	Description	Remark
Q1001	8-749-010-90	PHOTO REFLECTOR NJL5165KA-H2	
Q1002	8-749-010-90	PHOTO REFLECTOR NJL5165KA-H2	

< RESISTOR >

Ref. No.	Part No.	Description	Remark
R1001	1-247-818-11	CARBON 300 5% 1/4W	(Malaysia product)
R1001	1-249-412-11	CARBON 390 5% 1/4W	F (EXCEPT Malaysia product)
R1002	1-247-820-11	CARBON 360 5% 1/4W	(Malaysia product)
R1002	1-249-412-11	CARBON 390 5% 1/4W	F (EXCEPT Malaysia product)
R1003	1-249-414-11	CARBON 560 5% 1/4WF	
R1004	1-247-834-11	CARBON 1.3K 5% 1/4W	
R1005	1-247-818-11	CARBON 300 5% 1/4W	

< SWITCH >

Ref. No.	Part No.	Description	Remark
S1001	1-692-832-11	SWITCH, PUSH (1 KEY) (A PLAY)	
S1002	1-692-832-11	SWITCH, PUSH (1 KEY) (B PLAY)	
S1003	1-572-248-11	SWITCH, LEAF (A HALF)	
S1004	1-571-281-21	SWITCH, LEAF (A CrO2)	
S1005	1-571-281-21	SWITCH, LEAF (REC A)	
S1006	1-572-248-11	SWITCH, LEAF (B HALF)	
S1008	1-571-281-21	SWITCH, LEAF (B CrO2)	
S1009	1-571-281-21	SWITCH, LEAF (REC B)	

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Ref. No.	Part No.	Description	Remark
*	A-4389-549-A	MAIN BOARD, COMPLETE (AEP, UK) *****************************	
*	A-4389-560-A	MAIN BOARD, COMPLETE (US, CND) *****************************	
*	A-4389-563-A	MAIN BOARD, COMPLETE (E2, AR) ****************************	
*	A-4389-570-A	MAIN BOARD, COMPLETE (E3, SP, HK, IA, PX) *************************************	
*	A-4389-980-A	MAIN BOARD, COMPLETE (TH) *************************	
*	A-4390-003-A	MAIN BOARD, COMPLETE (EA, MY) ****************************	
*	A-4390-012-A	MAIN BOARD, COMPLETE (G, IT) ***************************	
*	A-4390-014-A	MAIN BOARD, COMPLETE (AUS) **************************	
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	

< CAPACITOR >

Ref. No.	Part No.	Description	Remark
C201	1-124-925-11	ELECT 2.2uF 20% 100V	
C202	1-130-479-00	MYLAR 0.0047uF 5% 50V	
C203	1-126-925-11	ELECT 470uF 20% 10V	

MAIN

Ref. No.	Part No.	Description			Remark
C204	1-126-933-11	ELECT	100uF	20%	10V
C205	1-164-159-21	CERAMIC	0.1uF		50V
C211	1-124-925-11	ELECT	2.2uF	20%	100V
C212	1-130-479-00	MYLAR	0.0047uF	5%	50V
C250	1-162-306-11	CERAMIC	0.01uF	20%	16V (AEP, UK, G, IT)
C251	1-164-035-11	CERAMIC	47PF	5%	50V (AEP, UK, G, IT)
C252	1-102-527-11	CERAMIC	82PF	5%	50V (AEP, UK, G, IT)
C253	1-162-291-31	CERAMIC	560PF	10%	50V (AEP, UK, G, IT)
C254	1-162-306-11	CERAMIC	0.01uF	20%	16V (AEP, UK, G, IT)
C255	1-162-288-31	CERAMIC	330PF	10%	50V (AEP, UK, G, IT)
C256	1-124-925-11	ELECT	2.2uF	20%	100V (AEP, UK, G, IT)
C257	1-126-964-11	ELECT	10uF	20%	50V (AEP, UK, G, IT)
C258	1-162-291-31	CERAMIC	560PF	10%	50V (AEP, UK, G, IT)
C259	1-126-964-11	ELECT	10uF	20%	50V (AEP, UK, G, IT)
C260	1-164-159-21	CERAMIC	0.1uF		50V (AEP, UK, G, IT)
C261	1-126-967-11	ELECT	47uF	20%	16V (AEP, UK, G, IT)
C263	1-162-294-11	CERAMIC	0.001uF	10%	50V
C301	1-130-479-00	MYLAR	0.0047uF	5%	50V
C302	1-162-290-31	CERAMIC	470PF	10%	50V
C303	1-136-165-00	FILM	0.1uF	5%	50V
C305	1-124-903-11	ELECT	1uF	20%	50V
C306	1-124-902-00	ELECT	0.47uF	20%	50V
C307	1-126-964-11	ELECT	10uF	20%	50V
C308	1-126-964-11	ELECT	10uF	20%	50V
C309	1-124-903-11	ELECT	1uF	20%	50V
C310	1-126-933-11	ELECT	100uF	20%	10V
C351	1-130-479-00	MYLAR	0.0047uF	5%	50V
C352	1-162-290-31	CERAMIC	470PF	10%	50V
C353	1-136-165-00	FILM	0.1uF	5%	50V
C355	1-124-903-11	ELECT	1uF	20%	50V
C356	1-124-902-00	ELECT	0.47uF	20%	50V
C357	1-126-964-11	ELECT	10uF	20%	50V
C358	1-126-964-11	ELECT	10uF	20%	50V
C359	1-124-903-11	ELECT	1uF	20%	50V
C360	1-126-933-11	ELECT	100uF	20%	10V
C401	1-164-159-21	CERAMIC	0.1uF		50V
C402	1-164-159-21	CERAMIC	0.1uF		50V
C403	1-164-159-21	CERAMIC	0.1uF		50V
C404	1-126-933-11	ELECT	100uF	20%	16V
C701	1-162-282-31	CERAMIC	100PF	10%	50V

Ref. No.	Part No.	Description			Remark
C702	1-126-926-11	ELECT	1000uF	20%	10V
C703	1-126-964-11	ELECT	10uF	20%	50V
C704	1-136-165-00	FILM	0.1uF	5%	50V
C705	1-136-165-00	FILM	0.1uF	5%	50V
C706	1-126-965-11	ELECT	22uF	20%	50V
C707	1-162-204-31	CERAMIC	16PF	5%	50V
C708	1-162-204-31	CERAMIC	16PF	5%	50V
C710	1-164-159-21	CERAMIC	0.1uF		50V
C711	1-164-159-21	CERAMIC	0.1uF		50V
C715	1-162-294-31	CERAMIC	0.001uF	10%	50V
C810	1-162-306-11	CERAMIC	0.01uF	30%	16V
C811	1-162-306-11	CERAMIC	0.01uF	30%	16V
C821	1-162-286-21	CERAMIC	220PF	10%	50V
C822	1-162-286-21	CERAMIC	220PF	10%	50V
C825	1-109-889-11	ELECT	1uF	20%	50V
C827	1-162-306-11	CERAMIC	0.01uF	30%	16V
C828	1-162-306-11	CERAMIC	0.01uF	30%	16V
C829	1-162-292-31	CERAMIC	680PF	10%	50V
C830	1-126-964-11	ELECT	10uF	20%	50V
C831	1-162-286-21	CERAMIC	220PF	10%	50V
C871	1-162-286-21	CERAMIC	220PF	10%	50V
C872	1-162-286-21	CERAMIC	220PF	10%	50V
C875	1-162-294-31	CERAMIC	0.001uF	10%	50V
C901	1-124-464-11	ELECT	0.22uF	20%	50V
C902	1-124-464-11	ELECT	0.22uF	20%	50V
C903	1-136-495-11	FILM	0.068uF	5%	50V
C904	1-136-495-11	FILM	0.068uF	5%	50V
C905	1-136-156-00	FILM	0.018uF	5%	50V
C906	1-136-156-00	FILM	0.018uF	5%	50V
C907	1-130-480-00	MYLAR	0.0056uF	5%	50V
C908	1-130-479-00	MYLAR	0.0047uF	5%	50V
C909	1-130-474-00	MYLAR	0.0018uF	5%	50V
C910	1-126-964-11	ELECT	10uF	20%	50V
C911	1-126-964-11	ELECT	10uF	20%	50V
C912	1-136-167-00	FILM	0.15uF	5%	50V
C913	1-136-167-00	FILM	0.15uF	5%	50V
C914	1-126-964-11	ELECT	10uF	20%	50V
C915	1-136-154-00	FILM	0.012uF	5%	50V
C930	1-136-167-00	FILM	0.15uF	5%	50V
C931	1-130-471-00	MYLAR	0.001uF	5%	50V
C934	1-126-933-11	ELECT	100uF	20%	10V
C935	1-164-159-21	CERAMIC	0.1uF		50V
C937	1-126-964-11	ELECT	10uF	20%	50V
C938	1-162-286-21	CERAMIC	220PF	10%	50V
C939	1-162-306-11	CERAMIC	0.01uF	30%	16V
C941	1-162-306-11	CERAMIC	0.01uF	30%	16V
C942	1-126-933-11	ELECT	100uF	20%	10V
C943	1-162-306-11	CERAMIC	0.01uF	30%	16V
C944	1-126-964-11	ELECT	10uF	20%	50V
C945	1-126-964-11	ELECT	10uF	20%	50V

Ref. No.	Part No.	Description			Remark
C947	1-162-306-11	CERAMIC	0.01uF	30%	16V
C948	1-126-964-11	ELECT	10uF	20%	50V
C951	1-124-464-11	ELECT	0.22uF	20%	50V
C952	1-124-464-11	ELECT	0.22uF	20%	50V
C953	1-136-495-11	FILM	0.068uF	5%	50V
C954	1-136-495-11	FILM	0.068uF	5%	50V
C955	1-136-156-00	FILM	0.018uF	5%	50V
C956	1-136-156-00	FILM	0.018uF	5%	50V
C957	1-130-480-00	MYLAR	0.0056uF	5%	50V
C958	1-130-479-00	MYLAR	0.0047uF	5%	50V
C959	1-130-474-00	MYLAR	0.0018uF	5%	50V
C960	1-126-964-11	ELECT	10uF	20%	50V
C961	1-126-964-11	ELECT	10uF	20%	50V
C962	1-136-167-00	FILM	0.15uF	5%	50V
C963	1-136-167-00	FILM	0.15uF	5%	50V
C964	1-126-964-11	ELECT	10uF	20%	50V
C965	1-136-154-00	FILM	0.012uF	5%	50V
C1001	1-126-946-11	ELECT	6800uF	20%	25V
C1002	1-126-943-11	ELECT	2200uF	20%	25V
C1004	1-126-926-11	ELECT	1000uF	20%	10V
C1005	1-126-964-11	ELECT	10uF	20%	50V
C1006	1-126-933-11	ELECT	100uF	20%	10V
C1007	1-126-933-11	ELECT	100uF	20%	10V
C1008	1-126-952-11	ELECT	1000uF	20%	16V
C1009	1-162-294-31	CERAMIC	0.001uF	10%	50V
C1010	1-164-159-21	CERAMIC	0.1uF		50V
C1011	1-164-159-21	CERAMIC	0.1uF		50V
C1012	1-126-964-11	ELECT	10uF	20%	50V
C1013	1-126-916-11	ELECT	1000uF	20%	6.3V
C1014	1-164-159-21	CERAMIC	0.1uF		50V
C1015	1-164-159-21	CERAMIC	0.1uF		50V
C1016	1-126-925-11	ELECT	470uF	20%	10V
C1017	1-126-925-11	ELECT	470uF	20%	10V
C1018	1-126-943-11	ELECT	2200uF	20%	25V
C1019	1-126-934-11	ELECT	220uF	20%	16V
C1020	1-126-947-11	ELECT	47uF	20%	35V
C1021	1-162-294-31	CERAMIC	1000PF	10%	50V
C1022	1-126-969-11	ELECT	220uF	20%	50V
C1023	1-126-969-11	ELECT	220uF	20%	50V
C1024	1-126-964-11	ELECT	10uF	20%	50V
C1025	1-126-964-11	ELECT	10uF	20%	50V
C1026	1-126-952-11	ELECT	1000uF	20%	16V
C1051	1-162-306-11	CERAMIC	0.01uF	30%	16V
C1101	1-136-167-00	FILM	0.15uF	5%	50V
C1102	1-136-167-00	FILM	0.15uF	5%	50V
C1103	1-126-962-11	ELECT	3.3uF	20%	50V
C1104	1-126-962-11	ELECT	3.3uF	20%	50V
C1105	1-136-167-00	FILM	0.15uF	5%	50V
C1106	1-136-167-00	FILM	0.15uF	5%	50V
C1107	1-126-963-11	ELECT	4.7uF	20%	50V

Ref. No.	Part No.	Description			Remark
C1108	1-126-963-11	ELECT	4.7uF	20%	50V
C1109	1-124-902-00	ELECT	0.47uF	20%	50V
C1110	1-124-902-00	ELECT	0.47uF	20%	50V
C1111	1-126-963-11	ELECT	4.7uF	20%	50V
C1112	1-126-963-11	ELECT	4.7uF	20%	50V
C1113	1-124-902-00	ELECT	0.47uF	20%	50V
C1114	1-124-902-00	ELECT	0.47uF	20%	50V
C1115	1-136-165-00	FILM	0.1uF	5%	50V
C1116	1-136-165-00	FILM	0.1uF	5%	50V
C1117	1-136-165-00	FILM	0.1uF	5%	50V
C1118	1-136-165-00	FILM	0.1uF	5%	50V
C1119	1-126-964-11	ELECT	10uF	20%	50V
C1120	1-126-964-11	ELECT	10uF	20%	50V
C1121	1-126-923-11	ELECT	220uF	20%	10V
C1122	1-126-964-11	ELECT	10uF	20%	50V
C1123	1-126-964-11	ELECT	10uF	20%	50V
C1124	1-126-964-11	ELECT	10uF	20%	50V
C1125	1-126-964-11	ELECT	10uF	20%	50V
C1126	1-126-923-11	ELECT	220uF	20%	10V
C1127	1-136-161-00	FILM	0.047uF	5%	50V
C1128	1-136-157-00	FILM	0.022uF	5%	50V
C1129	1-162-292-31	CERAMIC	680PF	10%	50V
C1130	1-126-933-11	ELECT	100uF	20%	10V
C1131	1-162-306-11	CERAMIC	0.01uF	30%	16V
C1132	1-126-964-11	ELECT	10uF	20%	50V
C1133	1-136-173-00	FILM	0.47uF	5%	50V
C1134	1-104-664-11	ELECT	47uF	20%	25V
C1135	1-130-467-00	MYLAR	470PF	5%	50V
C1136	1-130-467-00	MYLAR	470PF	5%	50V
C1137	1-162-306-11	CERAMIC	0.01uF	30%	16V
C1138	1-162-306-11	CERAMIC	0.01uF	30%	16V
C1141	1-126-964-11	ELECT	10uF	20%	50V
C1142	1-136-159-00	FILM	0.033uF	5%	50V
C1143	1-162-306-11	CERAMIC	0.01uF	30%	16V
C1144	1-126-933-11	ELECT	100uF	20%	10V
C1145	1-124-925-11	ELECT	2.2uF	20%	100V
C1146	1-162-286-21	CERAMIC	220PF	10%	50V
C1147	1-162-306-11	CERAMIC	0.01uF	30%	16V
C1148	1-126-923-11	ELECT	220uF	20%	10V
C1149	1-136-159-00	FILM	0.033uF	5%	50V
C1150	1-130-473-00	MYLAR	0.0015uF	5%	50V
C1151	1-136-159-00	FILM	0.033uF	5%	50V
C1152	1-124-903-11	ELECT	1uF	20%	50V
C1153	1-126-923-11	ELECT	220uF	20%	10V
C1154	1-126-964-11	ELECT	10uF	20%	50V
C1155	1-126-964-11	ELECT	10uF	20%	50V
C1156	1-126-964-11	ELECT	10uF	20%	50V
C1157	1-162-306-11	CERAMIC	0.01uF	30%	16V
C1158	1-162-286-21	CERAMIC	220PF	10%	50V
C1160	1-126-964-11	ELECT	10uF	20%	50V

MAIN

Ref. No.	Part No.	Description			Remark
C1161	1-162-294-31	CERAMIC	0.001uF	10%	50V
C1162	1-126-964-11	ELECT	10uF	20%	50V
C1163	1-162-294-31	CERAMIC	0.001uF	10%	50V
C1164	1-126-964-11	ELECT	10uF	20%	50V
C1165	1-126-964-11	ELECT	10uF	20%	50V
C1166	1-126-964-11	ELECT	10uF	20%	50V
C1167	1-126-964-11	ELECT	10uF	20%	50V
C1168	1-162-286-21	CERAMIC	220PF	10%	50V
C1169	1-109-889-11	ELECT	1uF	20%	50V
C1178	1-162-294-11	CERAMIC	0.001uF	10%	50V
C9001	1-162-306-11	CERAMIC	0.01uF	30%	16V
C9002	1-162-306-11	CERAMIC	0.01uF	30%	16V
C9003	1-162-294-11	CERAMIC	0.001uF	10%	50V
C9004	1-162-294-11	CERAMIC	0.001uF	10%	50V
C9005	1-162-282-31	CERAMIC	100PF	10%	50V
C9006	1-164-159-21	CERAMIC	0.1uF		50V
C9007	1-162-294-11	CERAMIC	0.001uF	10%	50V
C9008	1-162-294-11	CERAMIC	0.001uF	10%	50V
		< CONNECTOR >			
CN201	1-770-067-11	CONNECTOR, FFC/FPC 19P			
* CN202	1-568-936-21	PIN, CONNECTOR 9P			
* CN203	1-568-935-11	PIN, CONNECTOR 8P			
* CN250	1-568-834-11	SOCKET, CONNECTOR 15P (AEP, UK, G, IT, EA, HK, SP, MY, PX, IA, E3)			
* CN250	1-568-832-11	SOCKET, CONNECTOR 13P (US, CND, TH, AUS, AR, E2)			
CN401	1-568-838-11	SOCKET, CONNECTOR 21P			
* CN402	1-568-830-11	SOCKET, CONNECTOR 11P			
* CN403	1-568-449-11	HOUSING, CONNECTOR (PC BOARD) 3P			
* CN701	1-568-832-11	SOCKET, CONNECTOR 13P			
* CN1001	1-770-734-11	CONNECTOR, BOARD TO BOARD 20P			
CN1051	1-564-517-11	PLUG, CONNECTOR 2P			
		< DIODE >			
D201	8-719-987-63	DIODE 1N4148M			
D202	8-719-987-63	DIODE 1N4148M			
D251	8-719-987-63	DIODE 1N4148M (AEP, UK, G, IT)			
D401	8-719-933-54	DIODE HZS9A2L			
D701	8-719-987-63	DIODE 1N4148M			
D702	8-719-987-63	DIODE 1N4148M			
D703	8-719-987-63	DIODE 1N4148M			
D704	8-719-987-63	DIODE 1N4148M			
D705	8-719-987-63	DIODE 1N4148M			
D706	8-719-024-99	DIODE 11ES2-NTA2B (EA, MY)			
D706	8-719-200-82	DIODE 11ES2 (EXCEPT EA, MY)			
D707	8-719-987-63	DIODE 1N4148M			
D708	8-719-987-63	DIODE 1N4148M			
D711	8-719-024-99	DIODE 11ES2-NTA2B (EA, MY)			
D711	8-719-200-82	DIODE 11ES2 (EXCEPT EA, MY)			

Ref. No.	Part No.	Description	Remark
D901	8-719-987-63	DIODE 1N4148M	
D902	8-719-987-63	DIODE 1N4148M	
D1001	8-719-024-99	DIODE 11ES2-NTA2B (EA, MY)	
D1001	8-719-200-82	DIODE 11ES2 (EXCEPT EA, MY)	
D1002	8-719-024-99	DIODE 11ES2-NTA2B (EA, MY)	
D1002	8-719-200-82	DIODE 11ES2 (EXCEPT EA, MY)	
D1003	8-719-028-23	DIODE D3SBA20-4101	
D1007	8-719-987-63	DIODE 1N4148M	
D1008	8-719-001-42	DIODE UZL-11M1 (EA, MY)	
D1008	8-719-001-43	DIODE UZL-11M1-TA (EXCEPT EA, MY)	
D1009	8-719-987-63	DIODE 1N4148M	
D1010	8-719-987-63	DIODE 1N4148M	
D1011	8-719-010-43	DIODE UZ-5.6BSC	
D1012	8-719-934-22	DIODE HZS30-2L	
D1013	8-719-024-99	DIODE 11ES2-NTA2B (EA, MY)	
D1013	8-719-200-82	DIODE 11ES2 (EXCEPT EA, MY)	
D1014	8-719-024-99	DIODE 11ES2-NTA2B (EA, MY)	
D1014	8-719-200-82	DIODE 11ES2 (EXCEPT EA, MY)	
D1015	8-719-024-99	DIODE 11ES2-NTA2B (EA, MY)	
D1015	8-719-200-82	DIODE 11ES2 (EXCEPT EA, MY)	
D1016	8-719-024-99	DIODE 11ES2-NTA2B (EA, MY)	
D1016	8-719-200-82	DIODE 11ES2 (EXCEPT EA, MY)	
D1017	8-719-024-99	DIODE 11ES2-NTA2B (EA, MY)	
D1017	8-719-200-82	DIODE 11ES2 (EXCEPT EA, MY)	
D1018	8-719-024-99	DIODE 11ES2-NTA2B (EA, MY)	
D1018	8-719-200-82	DIODE 11ES2 (EXCEPT EA, MY)	
D1019	8-719-024-99	DIODE 11ES2-NTA2B (EA, MY)	
D1019	8-719-200-82	DIODE 11ES2 (EXCEPT EA, MY)	
		< GROUND TERMINAL >	
EPT901	1-537-770-21	TERMINAL BOARD, GROUND	
		< FERRITE BEAD >	
FB9001	1-412-473-21	INDUCTOR, FERRITE BEAD	
		< IC >	
IC201	8-749-923-04	IC TOTX178 (CD DIGITAL OUT OPTICAL)	
IC250	8-759-169-99	IC SAA6579 (AEP, UK, G, IT)	
IC251	8-759-634-51	IC M5218ACD, (AEP, UK, G, IT)	
IC401	8-759-289-38	IC HA12195NT	
IC402	8-759-822-09	IC LB1641	
IC701	8-759-398-86	IC TMP87CS64YF-6417	
IC702	8-759-165-80	IC PST600C-T	
IC802	8-759-000-48	IC MC14052BCP	
IC805	8-759-634-51	IC M5218AP	
IC901	8-759-331-39	IC M62427FP	
IC902	8-759-634-51	IC M5218AP	
IC1001	8-759-231-53	IC TA7805S	
IC1002	8-759-604-86	IC M5F7807	
IC1003	8-759-604-86	IC M5F7807	

Ref. No.	Part No.	Description	Remark
IC1004	8-759-604-90	IC M5F7907L	
IC1101	8-759-248-74	IC LA2785	
IC1102	8-759-341-23	IC LV1011	
IC1103	8-759-634-51	IC M5218AP	
IC1104	8-759-281-42	IC TC9210P	
		< JACK >	
J801	1-695-188-31	JACK, PIN 4P (VIDEO/MD, IN, OUT)	
J802	1-774-785-11	JACK, PIN 1P (SUPER WOOFER)	
		< COIL >	
L201	1-410-521-11	INDUCTOR 100uH	
L250	1-410-521-11	INDUCTOR 100uH (AEP, UK, G, IT)	
L701	1-410-521-11	INDUCTOR 100uH	
L702	1-410-521-11	INDUCTOR 100uH	
L703	1-410-521-11	INDUCTOR 100uH	
L704	1-410-521-11	INDUCTOR 100uH	
L1101	1-410-509-11	INDUCTOR 10uH	
L1102	1-410-509-11	INDUCTOR 10uH	
L1104	1-410-509-11	INDUCTOR 10uH	
		< TRANSISTOR >	
Q301	8-729-119-78	TRANSISTOR 2SC2785HFE	
Q351	8-729-119-78	TRANSISTOR 2SC2785HFE	
Q401	8-729-119-78	TRANSISTOR 2SC2785HFE	
Q402	8-729-900-65	TRANSISTOR DTA144ES	
Q403	8-729-801-93	TRANSISTOR 2SD1387	
Q406	8-729-900-80	TRANSISTOR DTC114ES	
Q407	8-729-422-57	TRANSISTOR UN4111	
Q408	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q409	8-729-900-80	TRANSISTOR DTC114ES	
Q410	8-729-900-65	TRANSISTOR DTA144ES	
Q411	8-729-900-65	TRANSISTOR DTA144ES	
Q412	8-729-900-65	TRANSISTOR DTA144ES	
Q701	8-729-119-78	TRANSISTOR 2SC2785HFE	
Q820	8-729-422-57	TRANSISTOR UN4111	
Q821	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q822	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q823	8-729-422-57	TRANSISTOR UN4111	
Q824	8-729-900-80	TRANSISTOR DTC114ES	
Q830	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q901	8-729-119-78	TRANSISTOR 2SC2785HFE	
Q902	8-729-119-78	TRANSISTOR 2SC2785HFE	
Q951	8-729-119-78	TRANSISTOR 2SC2785HFE	
Q952	8-729-119-78	TRANSISTOR 2SC2785HFE	
Q953	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q954	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q1001	8-729-118-01	TRANSISTOR 2SB1116	
Q1002	8-729-900-36	TRANSISTOR DTC124ES	
Q1003	8-729-021-82	TRANSISTOR 2SD2396K	

Ref. No.	Part No.	Description	Remark
Q1006	8-729-118-01	TRANSISTOR 2SB1116	
Q1051	8-729-111-29	TRANSISTOR 2SD1616A-K	
Q1052	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q1101	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q1102	8-729-141-26	TRANSISTOR 2SC3622A-LK	
		< RESISTOR >	
R201	1-249-415-11	CARBON 680 5% 1/4W	F
R202	1-249-435-11	CARBON 33K 5% 1/4W	
R211	1-249-415-11	CARBON 680 5% 1/4W	F
R212	1-249-435-11	CARBON 33K 5% 1/4W	
R215	1-247-807-31	CARBON 100 5% 1/4W	
R250	1-249-421-11	CARBON 2.2K 5% 1/4W	F (AEP, UK, G, IT)
R251	1-249-401-11	CARBON 47 5% 1/4W	F (AEP, UK, G, IT)
R252	1-249-441-11	CARBON 100K 5% 1/4W	(AEP, UK, G, IT)
R253	1-249-441-11	CARBON 100K 5% 1/4W	(AEP, UK, G, IT)
R254	1-249-426-11	CARBON 5.6K 5% 1/4W	(AEP, UK, G, IT)
R255	1-249-429-11	CARBON 10K 5% 1/4W	(AEP, UK, G, IT)
R256	1-247-807-31	CARBON 100 5% 1/4W	(AEP, UK, G, IT)
R301	1-249-430-11	CARBON 12K 5% 1/4W	
R302	1-249-431-11	CARBON 15K 5% 1/4W	
R303	1-249-432-11	CARBON 18K 5% 1/4W	
R304	1-249-428-11	CARBON 8.2K 5% 1/4W	F
R305	1-249-425-11	CARBON 4.7K 5% 1/4W	F
R306	1-247-840-00	CARBON 2.4K 5% 1/4W	
R307	1-247-863-91	CARBON 22K 5% 1/4W	
R308	1-249-421-11	CARBON 2.2K 5% 1/4W	F
R309	1-249-428-11	CARBON 8.2K 5% 1/4W	F
R310	1-249-417-11	CARBON 1K 5% 1/4W	F
R351	1-249-430-11	CARBON 12K 5% 1/4W	
R352	1-249-431-11	CARBON 15K 5% 1/4W	
R354	1-249-428-11	CARBON 8.2K 5% 1/4W	F
R355	1-249-425-11	CARBON 4.7K 5% 1/4W	F
R356	1-247-840-00	CARBON 2.4K 5% 1/4W	
R357	1-247-863-91	CARBON 22K 5% 1/4W	
R358	1-249-421-11	CARBON 2.2K 5% 1/4W	F
R359	1-249-428-11	CARBON 8.2K 5% 1/4W	F
R360	1-249-417-11	CARBON 1K 5% 1/4W	F
R401	1-249-425-11	CARBON 4.7K 5% 1/4W	F
R402	1-249-425-11	CARBON 4.7K 5% 1/4W	F
R403	1-249-425-11	CARBON 4.7K 5% 1/4W	F
R404	1-249-417-11	CARBON 1K 5% 1/4W	F
R405	1-249-437-11	CARBON 47K 5% 1/4W	
R406	1-249-437-11	CARBON 47K 5% 1/4W	

MAIN

Ref. No.	Part No.	Description				Remark
R407	1-249-437-11	CARBON	47K	5%	1/4W	
R408	1-249-437-11	CARBON	47K	5%	1/4W	
R409	1-249-429-11	CARBON	10K	5%	1/4W	
R410	1-247-882-11	CARBON	130K	5%	1/4W	
R411	1-247-866-11	CARBON	30K	5%	1/4W	
R412	1-249-429-11	CARBON	10K	5%	1/4W	
R413	1-247-864-11	CARBON	24K	5%	1/4W	
R414	1-249-429-11	CARBON	10K	5%	1/4W	
R415	1-249-429-11	CARBON	10K	5%	1/4W	
R416	1-249-429-11	CARBON	10K	5%	1/4W	
R417	1-249-429-11	CARBON	10K	5%	1/4W	
R418	1-249-429-11	CARBON	10K	5%	1/4W	
R419	1-249-429-11	CARBON	10K	5%	1/4W	
R420	1-249-429-11	CARBON	10K	5%	1/4W	
R421	1-249-429-11	CARBON	10K	5%	1/4W	
R454	1-249-425-11	CARBON	4.7K	5%	1/4W	F (EA, MY)
R454	1-247-863-91	CARBON	22K	5%	1/4W	(EXCEPT EA, MY)
R455	1-249-425-11	CARBON	4.7K	5%	1/4W	F (EA, MY)
R455	1-247-863-91	CARBON	22K	5%	1/4W	(EXCEPT EA, MY)
R456	1-249-411-11	CARBON	330	5%	1/4W	
R457	1-249-427-11	CARBON	6.8K	5%	1/4W	F
R458	1-249-429-11	CARBON	10K	5%	1/4W	
R461	1-249-417-11	CARBON	1K	5%	1/4W	F
R701	1-249-429-11	CARBON	10K	5%	1/4W	
R702	1-249-417-11	CARBON	1K	5%	1/4W	F
R703	1-249-429-11	CARBON	10K	5%	1/4W	
R705	1-249-429-11	CARBON	10K	5%	1/4W	
R707	1-249-429-11	CARBON	10K	5%	1/4W	
R708	1-247-807-31	CARBON	100	5%	1/4W	
R709	1-249-429-11	CARBON	10K	5%	1/4W	
R710	1-247-807-31	CARBON	100	5%	1/4W	
R711	1-249-429-11	CARBON	10K	5%	1/4W	
R713	1-247-807-31	CARBON	100	5%	1/4W	
R714	1-249-429-11	CARBON	10K	5%	1/4W	
R715	1-247-807-31	CARBON	100	5%	1/4W	
R716	1-247-807-31	CARBON	100	5%	1/4W	
R717	1-247-807-31	CARBON	100	5%	1/4W	
R718	1-247-807-31	CARBON	100	5%	1/4W	
R719	1-247-807-31	CARBON	100	5%	1/4W	
R720	1-247-807-31	CARBON	100	5%	1/4W	
R721	1-247-807-31	CARBON	100	5%	1/4W	
R722	1-247-807-31	CARBON	100	5%	1/4W	(AEP, UK, G, IT)
R723	1-247-807-31	CARBON	100	5%	1/4W	(AEP, UK, G, IT)
R724	1-247-807-31	CARBON	100	5%	1/4W	
R725	1-247-807-31	CARBON	100	5%	1/4W	
R726	1-247-807-31	CARBON	100	5%	1/4W	

Ref. No.	Part No.	Description				Remark
R727	1-247-807-31	CARBON	100	5%	1/4W	
R728	1-247-807-31	CARBON	100	5%	1/4W	
R729	1-247-807-31	CARBON	100	5%	1/4W	
R730	1-247-807-31	CARBON	100	5%	1/4W	
R731	1-247-807-31	CARBON	100	5%	1/4W	
R732	1-247-807-31	CARBON	100	5%	1/4W	
R733	1-247-807-31	CARBON	100	5%	1/4W	
R734	1-247-807-31	CARBON	100	5%	1/4W	
R735	1-247-807-31	CARBON	100	5%	1/4W	
R736	1-247-807-31	CARBON	100	5%	1/4W	
R737	1-247-807-31	CARBON	100	5%	1/4W	
R738	1-249-415-11	CARBON	680	5%	1/4W	F
R739	1-249-431-11	CARBON	15K	5%	1/4W	
R740	1-249-429-11	CARBON	10K	5%	1/4W	(AEP, UK)
R740	1-249-425-11	CARBON	4.7K	5%	1/4W	F (E2, AR, TH)
R740	1-247-863-91	CARBON	22K	5%	1/4W	(AUS)
R740	1-249-427-11	CARBON	6.8K	5%	1/4W	F (G, IT)
R741	1-249-423-11	CARBON	3.3K	5%	1/4W	F (AEP, UK, G, IT)
R741	1-249-427-11	CARBON	6.8K	5%	1/4W	F (E2, AR, TH)
R741	1-247-863-91	CARBON	22K	5%	1/4W	(AUS)
R742	1-249-413-11	CARBON	470	5%	1/4W	F
R743	1-247-807-31	CARBON	100	5%	1/4W	
R744	1-247-807-31	CARBON	100	5%	1/4W	
R745	1-247-807-31	CARBON	100	5%	1/4W	
R746	1-247-807-31	CARBON	100	5%	1/4W	
R747	1-247-807-31	CARBON	100	5%	1/4W	
R748	1-247-807-31	CARBON	100	5%	1/4W	
R749	1-247-807-31	CARBON	100	5%	1/4W	
R752	1-249-417-11	CARBON	1K	5%	1/4W	F
R753	1-249-417-11	CARBON	1K	5%	1/4W	F
R754	1-249-417-11	CARBON	1K	5%	1/4W	F
R757	1-249-429-11	CARBON	10K	5%	1/4W	
R758	1-249-429-11	CARBON	10K	5%	1/4W	
R759	1-249-429-11	CARBON	10K	5%	1/4W	
R763	1-249-429-11	CARBON	10K	5%	1/4W	
R764	1-247-807-31	CARBON	100	5%	1/4W	
R771	1-247-807-31	CARBON	100	5%	1/4W	
R772	1-247-807-31	CARBON	100	5%	1/4W	
R773	1-247-807-31	CARBON	100	5%	1/4W	
R774	1-247-807-31	CARBON	100	5%	1/4W	
R790	1-249-429-11	CARBON	10K	5%	1/4W	
R791	1-249-437-11	CARBON	47K	5%	1/4W	
R793	1-249-437-11	CARBON	47K	5%	1/4W	
R794	1-247-807-31	CARBON	100	5%	1/4W	
R795	1-249-429-11	CARBON	10K	5%	1/4W	
R796	1-249-429-11	CARBON	10K	5%	1/4W	

Ref. No.	Part No.	Description				Remark
R810	1-249-417-11	CARBON	1K	5%	1/4W	F
R811	1-249-417-11	CARBON	1K	5%	1/4W	F
R821	1-249-424-11	CARBON	3.9K	5%	1/4W	F
R822	1-247-887-00	CARBON	220K	5%	1/4W	
R823	1-249-417-11	CARBON	1K	5%	1/4W	F
R824	1-249-441-11	CARBON	100K	5%	1/4W	
R825	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R826	1-249-441-11	CARBON	100K	5%	1/4W	
R827	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R828	1-249-426-11	CARBON	5.6K	5%	1/4W	
R829	1-249-429-11	CARBON	10K	5%	1/4W	
R830	1-249-441-11	CARBON	100K	5%	1/4W	
R831	1-249-437-11	CARBON	47K	5%	1/4W	
R832	1-249-441-11	CARBON	100K	5%	1/4W	F
R833	1-249-429-11	CARBON	10K	5%	1/4W	
R835	1-249-417-11	CARBON	1K	5%	1/4W	F
R836	1-249-429-11	CARBON	10K	5%	1/4W	
R850	1-249-417-11	CARBON	1K	5%	1/4W	F
R870	1-249-441-11	CARBON	100K	5%	1/4W	
R871	1-249-424-11	CARBON	3.9K	5%	1/4W	F
R872	1-247-887-00	CARBON	220K	5%	1/4W	
R873	1-249-417-11	CARBON	1K	5%	1/4W	F
R874	1-249-441-11	CARBON	100K	5%	1/4W	
R878	1-249-426-11	CARBON	5.6K	5%	1/4W	
R879	1-249-429-11	CARBON	10K	5%	1/4W	
R901	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R902	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R903	1-249-437-11	CARBON	47K	5%	1/4W	
R904	1-249-437-11	CARBON	47K	5%	1/4W	
R905	1-249-441-11	CARBON	100K	5%	1/4W	
R906	1-247-903-00	CARBON	1M	5%	1/4W	
R907	1-249-441-11	CARBON	100K	5%	1/4W	
R908	1-249-429-11	CARBON	10K	5%	1/4W	
R909	1-249-417-11	CARBON	1K	5%	1/4W	F
R910	1-249-429-11	CARBON	10K	5%	1/4W	
R911	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R912	1-249-441-11	CARBON	100K	5%	1/4W	
R913	1-249-429-11	CARBON	10K	5%	1/4W	
R914	1-249-437-11	CARBON	47K	5%	1/4W	
R915	1-249-441-11	CARBON	100K	5%	1/4W	
R917	1-249-431-11	CARBON	15K	5%	1/4W	
R922	1-247-903-00	CARBON	1M	5%	1/4W	
R923	1-247-903-00	CARBON	1M	5%	1/4W	
R930	1-247-863-91	CARBON	22K	5%	1/4W	
R931	1-247-863-91	CARBON	22K	5%	1/4W	
R932	1-249-429-11	CARBON	10K	5%	1/4W	
R933	1-247-891-00	CARBON	330K	5%	1/4W	
R934	1-249-441-11	CARBON	100K	5%	1/4W	
R940	1-249-429-11	CARBON	10K	5%	1/4W	
R941	1-249-429-11	CARBON	10K	5%	1/4W	

Ref. No.	Part No.	Description				Remark
R942	1-249-429-11	CARBON	10K	5%	1/4W	
R943	1-249-417-11	CARBON	1K	5%	1/4W	F
R944	1-249-417-11	CARBON	1K	5%	1/4W	F
R945	1-249-417-11	CARBON	1K	5%	1/4W	F
R951	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R952	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R953	1-249-437-11	CARBON	47K	5%	1/4W	
R954	1-249-437-11	CARBON	47K	5%	1/4W	
R955	1-249-441-11	CARBON	100K	5%	1/4W	
R956	1-247-903-00	CARBON	1M	5%	1/4W	
R957	1-249-441-11	CARBON	100K	5%	1/4W	F
R958	1-249-429-11	CARBON	10K	5%	1/4W	
R959	1-249-417-11	CARBON	1K	5%	1/4W	F
R960	1-249-429-11	CARBON	10K	5%	1/4W	
R961	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R962	1-249-441-11	CARBON	100K	5%	1/4W	
R963	1-249-429-11	CARBON	10K	5%	1/4W	
R964	1-249-437-11	CARBON	47K	5%	1/4W	
R965	1-249-441-11	CARBON	100K	5%	1/4W	
R967	1-249-431-11	CARBON	15K	5%	1/4W	
R973	1-247-903-00	CARBON	1M	5%	1/4W	
R1001	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R1002	1-247-815-91	CARBON	220	5%	1/4W	
R1003	1-249-417-11	CARBON	1K	5%	1/4W	F
R1004	1-249-417-11	CARBON	1K	5%	1/4W	F
⚠R1005	1-219-122-91	FUSIBLE	0.33	5%	1/4W	F
R1020	1-247-815-91	CARBON	220	5%	1/4W	
R1021	1-247-815-91	CARBON	220	5%	1/4W	
R1022	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R1023	1-249-417-11	CARBON	1K	5%	1/4W	F
⚠R1024	1-217-637-00	FUSIBLE	1	5%	1/4W	F
R1051	1-249-421-11	CARBON	2.2K	5%	1/4W	
R1052	1-249-432-11	CARBON	18K	5%	1/4W	
R1053	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R1101	1-247-887-00	CARBON	220K	5%	1/4W	
R1102	1-247-887-00	CARBON	220K	5%	1/4W	
R1103	1-249-417-11	CARBON	1K	5%	1/4W	F
R1104	1-249-432-11	CARBON	18K	5%	1/4W	
R1105	1-249-417-11	CARBON	1K	5%	1/4W	F
R1115	1-249-441-11	CARBON	100K	5%	1/4W	
R1121	1-249-436-11	CARBON	39K	5%	1/4W	
R1122	1-249-436-11	CARBON	39K	5%	1/4W	
R1123	1-249-417-11	CARBON	1K	5%	1/4W	F
R1124	1-247-903-00	CARBON	1M	5%	1/4W	
R1125	1-249-411-11	CARBON	330	5%	1/4W	
R1126	1-249-417-11	CARBON	1K	5%	1/4W	F
R1127	1-249-417-11	CARBON	1K	5%	1/4W	F
R1128	1-249-417-11	CARBON	1K	5%	1/4W	F
R1130	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R1131	1-249-432-11	CARBON	18K	5%	1/4W	F

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Ref. No.	Part No.	Description				Remark
R1132	1-249-441-11	CARBON	100K	5%	1/4W	
R1133	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R1134	1-249-432-11	CARBON	18K	5%	1/4W	F
R1135	1-249-441-11	CARBON	100K	5%	1/4W	
R1136	1-249-437-11	CARBON	47K	5%	1/4W	
R1137	1-249-441-11	CARBON	100K	5%	1/4W	
R1138	1-249-441-11	CARBON	100K	5%	1/4W	
R1139	1-249-417-11	CARBON	1K	5%	1/4W	F
R1140	1-249-417-11	CARBON	1K	5%	1/4W	F
R1141	1-249-417-11	CARBON	1K	5%	1/4W	F
R1142	1-249-417-11	CARBON	1K	5%	1/4W	F
R1143	1-249-417-11	CARBON	1K	5%	1/4W	F
R1144	1-249-417-11	CARBON	1K	5%	1/4W	F
R1145	1-249-429-11	CARBON	10K	5%	1/4W	
R1146	1-249-429-11	CARBON	10K	5%	1/4W	
R1150	1-249-441-11	CARBON	100K	5%	1/4W	
R1151	1-249-417-11	CARBON	1K	5%	1/4W	F

< VARIABLE RESISTOR >

RV301	1-238-600-11	RES, ADJ, CARBON 10K
RV351	1-238-600-11	RES, ADJ, CARBON 10K

< VIBRATOR >

X81	1-579-900-21	VIBRATOR, CRYSTAL(4.332MHz) (AEP, UK, G, IT)
X701	1-579-175-11	VIBRATOR, CERAMIC (10MHz)
X702	1-567-098-41	VIBRATOR, CRYSTAL (32kHz)
X1101	1-579-125-11	VIBRATOR, CERAMIC (8MHz)

****

* A-2007-435-A MD BOARD, COMPLETE

****

(including MOTOR board)

< CAPACITOR >

C301	1-162-289-31	CERAMIC	390PF	10%	50V
C302	1-126-968-11	ELECT	100uF	20%	6.3V
C303	1-162-282-31	CERAMIC	100PF	10%	50V
C304	1-107-715-11	ELECT	22uF	20%	16V
C304	1-130-483-00	MYLAR	0.01uF	5%	50V
C305	1-107-715-11	ELECT	22uF	20%	16V
C311	1-162-289-31	CERAMIC	390PF	10%	50V
C313	1-162-282-31	CERAMIC	100PF	10%	50V
C314	1-130-487-00	MYLAR	0.022uF	5%	50V
C315	1-126-233-11	ELECT	22uF	20%	50V
C331	1-137-427-11	FILM	120PF	5%	50V
C332	1-162-288-31	CERAMIC	330PF	10%	50V
C333	1-162-209-31	CERAMIC	27PF	5%	50V
C401	1-162-289-31	CERAMIC	390PF	10%	50V
C402	1-126-968-11	ELECT	100uF	20%	6.3V
C403	1-162-282-31	CERAMIC	100PF	10%	50V
C404	1-130-483-00	MYLAR	0.01uF	5%	50V
C411	1-162-289-31	CERAMIC	390PF	10%	50V
C413	1-162-282-31	CERAMIC	100PF	10%	50V
C414	1-130-487-00	MYLAR	0.022uF	5%	50V
C415	1-126-233-11	ELECT	22uF	20%	50V
C431	1-137-427-11	FILM	120PF	5%	50V
C432	1-162-288-31	CERAMIC	330PF	10%	50V
C433	1-162-209-31	CERAMIC	27PF	5%	50V
C601	1-126-157-11	ELECT	10uF	20%	16V
C602	1-126-157-11	ELECT	10uF	20%	16V
C611	1-124-907-11	ELECT	10uF	20%	50V
C612	1-124-907-11	ELECT	10uF	20%	50V
C621	1-137-150-11	FILM	0.01uF	5%	100V
C622	1-126-961-11	ELECT	2.2uF	20%	50V
C623	1-136-155-00	FILM	0.015uF	5%	50V
C624	1-130-481-00	MYLAR	0.0068uF	5%	50V
C625	1-130-481-00	MYLAR	0.0068uF	5%	50V
C627	1-124-903-11	ELECT	1uF	20%	50V
C628	1-136-153-00	FILM	0.01uF	5%	50V
C642	1-104-664-11	ELECT	47uF	20%	16V
C651	1-161-494-00	CERAMIC	0.022uF		25V

< CONNECTOR >

* CN601	1-568-864-11	SOCKET, CONNECTOR 21P
* CN602	1-564-718-11	PIN, CONNECTOR (SMALL TYPE) 2P
* CN651	1-564-521-11	PLUG, CONNECTOR 6P

< IC >

IC601	8-759-710-59	IC	NJM4580D-D
IC602	8-759-143-54	IC	uPC1330HA
IC611	8-759-710-59	IC	NJM4580D-D

< COIL >

L331	1-410-780-11	INDUCTOR 27mH
L431	1-410-780-11	INDUCTOR 27mH

< TRANSISTOR >

Q621	8-729-142-46	TRANSISTOR	2SC2001-LK
Q622	8-729-142-46	TRANSISTOR	2SC2001-LK
Q623	8-729-030-18	TRANSISTOR	2SD2525
Q651	8-729-900-65	TRANSISTOR	DTA144ES

< RESISTOR >

R301	1-247-881-00	CARBON	120K	5%	1/4W	
R302	1-249-409-11	CARBON	220	5%	1/4W	F
R303	1-249-433-11	CARBON	22K	5%	1/4W	
R304	1-247-889-00	CARBON	270K	5%	1/4W	
R305	1-247-858-11	CARBON	13K	5%	1/4W	
R311	1-247-881-00	CARBON	120K	5%	1/4W	
R312	1-247-807-31	CARBON	100	5%	1/4W	

Ref. No.	Part No.	Description				Remark
R314	1-247-882-11	CARBON	130K	5%	1/4W	
R315	1-247-850-11	CARBON	6.2K	5%	1/4W	
R331	1-249-430-11	CARBON	12K	5%	1/4W	
R401	1-247-881-00	CARBON	120K	5%	1/4W	
R402	1-249-409-11	CARBON	220	5%	1/4W	F
R403	1-249-433-11	CARBON	22K	5%	1/4W	
R404	1-247-889-00	CARBON	270K	5%	1/4W	
R405	1-247-858-11	CARBON	13K	5%	1/4W	
R411	1-247-881-00	CARBON	120K	5%	1/4W	
R412	1-247-807-31	CARBON	100	5%	1/4W	
R414	1-247-882-11	CARBON	130K	5%	1/4W	
R415	1-247-850-11	CARBON	6.2K	5%	1/4W	
R431	1-249-430-11	CARBON	12K	5%	1/4W	
R601	1-249-409-11	CARBON	220	5%	1/4W	F
R602	1-249-409-11	CARBON	220	5%	1/4W	F
R608	1-249-409-11	CARBON	220	5%	1/4W	F
R609	1-249-433-11	CARBON	22K	5%	1/4W	
R611	1-249-409-11	CARBON	220	5%	1/4W	F
R612	1-249-409-11	CARBON	220	5%	1/4W	F
⚠R621	1-212-851-00	FUSIBLE	5.6	5%	1/4W	F
⚠R622	1-212-851-00	FUSIBLE	5.6	5%	1/4W	F
R623	1-249-432-11	CARBON	18K	5%	1/4W	
R624	1-249-432-11	CARBON	18K	5%	1/4W	
R625	1-249-429-11	CARBON	10K	5%	1/4W	
R651	1-247-856-00	CARBON	11K	5%	1/4W	
R652	1-247-856-00	CARBON	11K	5%	1/4W	
R653	1-249-441-11	CARBON	100K	5%	1/4W	
		< VARIABLE RESISTOR >				
RV301	1-238-598-11	RES, ADJ, CARBON 2.2K				
RV311	1-238-598-11	RES, ADJ, CARBON 2.2K				
RV341	1-238-551-11	RES, ADJ, CARBON 220K				
RV401	1-238-598-11	RES, ADJ, CARBON 2.2K				
RV411	1-238-598-11	RES, ADJ, CARBON 2.2K				
RV441	1-238-551-11	RES, ADJ, CARBON 220K				
RV651	1-238-599-11	RES, ADJ, CARBON 4.7K				
RV652	1-238-599-11	RES, ADJ, CARBON 4.7K				
		< TRANSFORMER >				
T621	1-423-980-11	TRANSFORMER, BIAS OSCILLATION				

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Ref. No.	Part No.	Description				Remark
*	1-658-578-11	MOTOR (SLIDE) BOARD *******************				
		< CAPACITOR >				
C801	1-162-306-11	CERAMIC	0.01uF	30%	16V	
C804	1-162-306-11	CERAMIC	0.01uF	30%	16V	
C805	1-124-907-11	ELECT	10uF	20%	50V	(Thailand product)
C805	1-126-964-11	ELECT	10uF	20%	50V	(EXCEPT Thailand product)
		< CONNECTOR >				
* CN801	1-568-947-11	PIN, CONNECTOR 9P				
		< DIODE >				
D801	8-719-010-43	DIODE UZ-5.6BSC				
D804	8-719-987-63	DIODE 1N4148M				
D805	8-719-987-63	DIODE 1N4148M				
		< IC >				
IC801	8-759-274-09	IC BA6286N				
		< RESISTOR >				
R801	1-249-401-11	CARBON	47	5%	1/4W	F
		< SWITCH >				
S801	1-762-527-11	SWITCH, ROTARY (OPEN/CLOSE DET)				

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Ref. No.	Part No.	Description				Remark
*	1-658-577-11	MOTOR (TURN) BOARD *******************				
		< CAPACITOR >				
C701	1-162-306-11	CERAMIC	0.01uF	30%	16V	
C702	1-124-907-11	ELECT	10uF	20%	50V	(Thailand product)
C702	1-126-964-11	ELECT	10uF	20%	50V	(EXCEPT Thailand product)
C705	1-162-306-11	CERAMIC	0.01uF	30%	16V	
		< CONNECTOR >				
CN703	1-750-413-11	CONNECTOR, FFC/FPC 8P				
CN704	1-506-469-11	PIN, CONNECTOR 4P				
		< DIODE >				
D701	8-719-010-23	DIODE UZ-3.6BSB				
		< IC >				
IC701	8-759-633-65	IC M54641L				
		< RESISTOR >				
R706	1-249-411-11	CARBON	330	5%	1/4W	
R707	1-249-401-11	CARBON	47	5%	1/4W	F

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PANEL

Ref. No.	Part No.	Description				Remark
*	A-4389-027-A	PANEL BOARD, COMPLETE (EA, MY)				
		*****************************				
*	A-4389-360-A	PANEL BOARD, COMPLETE (TH)				
		**************************				
*	A-4389-538-A	PANEL BOARD, COMPLETE (AEP, UK, G, IT)				
		***********************************				
*	A-4389-556-A	PANEL BOARD, COMPLETE (US, CND)				
		******************************				
*	A-4389-562-A	PANEL BOARD, COMPLETE (E2, AR)				
		*****************************				
*	A-4389-565-A	PANEL BOARD, COMPLETE				
		**********************				
						(E3, HK, SP, AUS, IA, PX)
*	4-932-810-11	CUSHION (FL)				
	4-971-014-11	HOLDER, FL TUBE				
		< CAPACITOR >				
C500	1-162-306-11	CERAMIC	0.01uF	30%	16V	
C501	1-126-154-11	ELECT	47uF	20%	6.3V	
C502	1-162-282-31	CERAMIC	100PF	10%	50V	
C504	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C505	1-126-154-11	ELECT	47uF	20%	6.3V	
C506	1-126-160-11	ELECT	1uF	20%	50V	
C507	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C508	1-126-160-11	ELECT	1uF	20%	50V	
C509	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C510	1-162-282-31	CERAMIC	100PF	10%	50V	
C511	1-162-282-31	CERAMIC	100PF	10%	50V	
C512	1-162-282-31	CERAMIC	100PF	10%	50V	
C513	1-162-282-31	CERAMIC	100PF	10%	50V	
C514	1-162-282-31	CERAMIC	100PF	10%	50V	
C515	1-162-282-31	CERAMIC	100PF	10%	50V	
C516	1-162-282-31	CERAMIC	100PF	10%	50V	
C517	1-162-282-31	CERAMIC	100PF	10%	50V	
C518	1-162-282-31	CERAMIC	100PF	10%	50V	
C519	1-162-282-31	CERAMIC	100PF	10%	50V	
C520	1-162-282-31	CERAMIC	100PF	10%	50V	
C521	1-162-282-31	CERAMIC	100PF	10%	50V	
C522	1-162-282-31	CERAMIC	100PF	10%	50V	
C523	1-162-282-31	CERAMIC	100PF	10%	50V	
C530	1-126-160-11	ELECT	1uF	20%	50V	
C531	1-136-161-00	FILM	0.047uF	5%	50V	
C532	1-124-464-11	ELECT	0.22uF	20%	50V	
C533	1-124-464-11	ELECT	0.22uF	20%	50V	
C534	1-162-306-11	CERAMIC	0.01uF	30%	16V	
C535	1-124-464-11	ELECT	0.22uF	20%	50V	
C536	1-136-159-00	FILM	0.033uF	5%	50V	
C537	1-162-302-11	CERAMIC	0.0022uF	30%	16V	
C538	1-124-464-11	ELECT	0.22uF	20%	50V	
C539	1-162-288-31	CERAMIC	330PF	10%	50V	
C540	1-124-464-11	ELECT	0.22uF	20%	50V	
C641	1-126-163-11	ELECT	4.7uF	20%	50V	
		< CONNECTOR >				
* CN500	1-568-856-11	SOCKET, CONNECTOR 13P				
* CN503	1-568-946-11	PIN, CONNECTOR 8P				
		< DIODE >				
D500	8-719-058-03	DIODE SEL5423E-TP15 (TUNER/BAND)				
D501	8-719-033-06	DIODE SEL5920A (CLIP C)				
D502	8-719-057-97	DIODE SEL5923A-TP15 (DSP)				
D502A	8-719-057-97	DIODE SEL5923A-TP15 (DSP)				
D503	8-719-033-06	DIODE SEL5920A (CLIP B)				
D504	8-719-057-97	DIODE SEL5923A-TP15 (DOLBY PRO LOGIC)				
D504A	8-719-057-97	DIODE SEL5923A-TP15 (DOLBY PRO LOGIC)				
D505	8-719-033-06	DIODE SEL5920A (CLIP A)				
D506	8-719-058-17	DIODE LNJ401NPYJA (GROOVE)				
D507	8-719-057-09	DIODE LNJ801LPDJA (EFFECT ON/OFF)				
D529	8-719-057-97	DIODE SEL5923A-TP15 (CD)				
D531	8-719-057-97	DIODE SEL5923A-TP15 (1/ALL DISCS)				
D533	8-719-057-97	DIODE SEL5923A-TP15 (PLAY MODE)				
D535	8-719-057-97	DIODE SEL5923A-TP15 (REPEAT)				
D537	8-719-057-97	DIODE SEL5923A-TP15 (EDIT)				
D539	8-719-057-97	DIODE SEL5923A-TP15 (TUNER)				
D541	8-719-057-97	DIODE SEL5923A-TP15 (TUNING MODE)				
D543	8-719-057-97	DIODE SEL5923A-TP15 (TUNER MEMORY)				
D545	8-719-057-97	DIODE SEL5923A-TP15 (STEREO)				
D547	8-719-057-97	DIODE SEL5923A-TP15 (MONO)				
D549	8-719-057-97	DIODE SEL5923A-TP15 (TIMER)				
D551	8-719-057-97	DIODE SEL5923A-TP15 (CLOCK SET)				
D553	8-719-057-97	DIODE SEL5923A-TP15 (SET)				
D555	8-719-057-97	DIODE SEL5923A-TP15 (SELECT)				
D557	8-719-057-97	DIODE SEL5923A-TP15 (SLEEP)				
D559	8-719-987-63	DIODE 1N4148M				
D560	8-719-987-63	DIODE 1N4148M				
D561	8-719-987-63	DIODE 1N4148M				
D562	8-719-987-63	DIODE 1N4148M				
D563	8-719-987-63	DIODE 1N4148M				
		< FLUORESCENT INDICATOR >				
FL501	1-517-483-11	INDICATOR TUBE, FLUORESCENT				
		< IC >				
IC500	8-759-375-43	IC ASD0204-012-3BA				
IC501	8-759-332-18	IC GP1U27XB				

Ref. No.	Part No.	Description				Remark
		< TRANSISTOR >				
Q500	8-729-119-78	TRANSISTOR 2SC2785HFE				
Q501	8-729-118-00	TRANSISTOR 2SB1116-L				
Q502	8-729-118-00	TRANSISTOR 2SB1116-L				
Q503	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q504	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q505	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q506	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q514	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q515	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q516	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q517	8-729-111-29	TRANSISTOR 2SD1616A-K				
Q518	8-729-111-29	TRANSISTOR 2SD1616A-K				
Q519	8-729-111-29	TRANSISTOR 2SD1616A-K				
Q520	8-729-119-78	TRANSISTOR 2SC2785HFE				
		< RESISTOR >				
R500	1-247-887-00	CARBON	220K	5%	1/4W	
R501	1-247-903-00	CARBON	1M	5%	1/4W	
R502	1-249-429-11	CARBON	10K	5%	1/4W	
R503	1-249-429-11	CARBON	10K	5%	1/4W	
R504	1-249-429-11	CARBON	10K	5%	1/4W	
R505	1-249-429-11	CARBON	10K	5%	1/4W	
R506	1-249-429-11	CARBON	10K	5%	1/4W	
R507	1-249-429-11	CARBON	10K	5%	1/4W	
R508	1-249-429-11	CARBON	10K	5%	1/4W	
R510	1-247-807-31	CARBON	100	5%	1/4W	
R511	1-247-807-31	CARBON	100	5%	1/4W	
R512	1-247-807-31	CARBON	100	5%	1/4W	
R513	1-247-807-31	CARBON	100	5%	1/4W	
R514	1-247-807-31	CARBON	100	5%	1/4W	
R515	1-247-807-31	CARBON	100	5%	1/4W	
R516	1-249-441-11	CARBON	100K	5%	1/4W	
R517	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R526	1-249-415-11	CARBON	680	5%	1/4W	F
R527	1-249-417-11	CARBON	1K	5%	1/4W	F
R528	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R529	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R530	1-249-423-11	CARBON	3.3K	5%	1/4W	F
R531	1-249-427-11	CARBON	6.8K	5%	1/4W	F
R532	1-249-431-11	CARBON	15K	5%	1/4W	
R533	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R534	1-249-401-11	CARBON	47	5%	1/4W	F
R535	1-249-403-11	CARBON	68	5%	1/4W	F
R536	1-247-807-31	CARBON	100	5%	1/4W	
R537	1-249-407-11	CARBON	150	5%	1/4W	F
R538	1-249-407-11	CARBON	150	5%	1/4W	F
R539	1-247-815-91	CARBON	220	5%	1/4W	
R540	1-249-411-11	CARBON	330	5%	1/4W	
R547	1-249-419-11	CARBON	1.5K	5%	1/4W	F

Ref. No.	Part No.	Description				Remark
R548	1-249-401-11	CARBON	47	5%	1/4W	F
R549	1-249-403-11	CARBON	68	5%	1/4W	F
R550	1-247-807-31	CARBON	100	5%	1/4W	
R551	1-249-407-11	CARBON	150	5%	1/4W	F
R552	1-249-407-11	CARBON	150	5%	1/4W	F
R563	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R564	1-249-401-11	CARBON	47	5%	1/4W	F
R565	1-249-413-11	CARBON	470	5%	1/4W	F
R566	1-247-815-91	CARBON	220	5%	1/4W	
R567	1-249-411-11	CARBON	330	5%	1/4W	
R576	1-249-429-11	CARBON	10K	5%	1/4W	
R577	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R578	1-249-429-11	CARBON	10K	5%	1/4W	
R579	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R580	1-249-401-11	CARBON	47	5%	1/4W	F
R581	1-249-407-11	CARBON	150	5%	1/4W	F
R582	1-249-403-11	CARBON	68	5%	1/4W	F
R583	1-249-407-11	CARBON	150	5%	1/4W	F
R584	1-249-403-11	CARBON	68	5%	1/4W	F
R585	1-249-407-11	CARBON	150	5%	1/4W	F
R586	1-247-807-31	CARBON	100	5%	1/4W	
R587	1-249-407-11	CARBON	150	5%	1/4W	F
R616	1-249-406-11	CARBON	120	5%	1/4W	F
R617	1-249-406-11	CARBON	120	5%	1/4W	F
R618	1-249-406-11	CARBON	120	5%	1/4W	F
R619	1-249-406-11	CARBON	120	5%	1/4W	F
R620	1-249-406-11	CARBON	120	5%	1/4W	F
R621	1-249-407-11	CARBON	150	5%	1/4W	F
R622	1-249-407-11	CARBON	150	5%	1/4W	F
R623	1-249-407-11	CARBON	150	5%	1/4W	F
R624	1-249-407-11	CARBON	150	5%	1/4W	F
R625	1-249-407-11	CARBON	150	5%	1/4W	F
R626	1-249-408-11	CARBON	180	5%	1/4W	F
R627	1-249-408-11	CARBON	180	5%	1/4W	F
R628	1-249-408-11	CARBON	180	5%	1/4W	F
R629	1-249-408-11	CARBON	180	5%	1/4W	F
R630	1-249-408-11	CARBON	180	5%	1/4W	F
R631	1-247-899-11	CARBON	680K	5%	1/4W	
R632	1-247-899-11	CARBON	680K	5%	1/4W	
R633	1-247-899-11	CARBON	680K	5%	1/4W	
R634	1-247-899-11	CARBON	680K	5%	1/4W	
R646	1-249-417-11	CARBON	1K	5%	1/4W	F
R647	1-249-417-11	CARBON	1K	5%	1/4W	F
R648	1-249-417-11	CARBON	1K	5%	1/4W	F
R649	1-249-401-11	CARBON	47	5%	1/4W	F
R650	1-249-429-11	CARBON	10K	5%	1/4W	
R651	1-249-429-11	CARBON	10K	5%	1/4W	
R652	1-249-429-11	CARBON	10K	5%	1/4W	
R653	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R654	1-249-437-11	CARBON	47K	5%	1/4W	

PANEL

POWER AMP

Ref. No.	Part No.	Description				Remark
R655	1-247-895-00	CARBON	470K	5%	1/4W	
R656	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R657	1-249-437-11	CARBON	47K	5%	1/4W	
R658	1-247-895-00	CARBON	470K	5%	1/4W	
R659	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R660	1-249-437-11	CARBON	47K	5%	1/4W	
R661	1-247-895-00	CARBON	470K	5%	1/4W	
R662	1-249-437-11	CARBON	47K	5%	1/4W	
R663	1-247-895-00	CARBON	470K	5%	1/4W	
R665	1-249-441-11	CARBON	100K	5%	1/4W	
R666	1-249-429-11	CARBON	10K	5%	1/4W	
		< SWITCH >				
S509	1-554-303-21	SWITCH, TACTILE (TIMER)				
S510	1-554-303-21	SWITCH, TACTILE (DSP)				
S511	1-554-303-21	SWITCH, TACTILE (DOLBY PRO LOGIC)				
S512	1-554-303-21	SWITCH, TACTILE (MULTI FUNCTION CONTROL) (1)				
S513	1-554-303-21	SWITCH, TACTILE (MULTI FUNCTION CONTROL) (2)				
S514	1-554-303-21	SWITCH, TACTILE (MULTI FUNCTION CONTROL) (3)				
S515	1-554-303-21	SWITCH, TACTILE (MULTI FUNCTION CONTROL) (4)				
S517	1-554-303-21	SWITCH, TACTILE (DISPLAY/DEMO)				
S519	1-554-303-21	SWITCH, TACTILE (CLIP PLAY, CD MUSIC CLIP)				
S520	1-554-303-21	SWITCH, TACTILE (CLIP ERASE, CD MUSIC CLIP)				
S521	1-554-303-21	SWITCH, TACTILE (CLIP A, CD MUSIC CLIP)				
S522	1-554-303-21	SWITCH, TACTILE (CLIP B, CD MUSIC CLIP)				
S523	1-554-303-21	SWITCH, TACTILE (CLIP C, CD MUSIC CLIP)				
S530	1-554-303-21	SWITCH, TACTILE (MENU 1)				
S531	1-554-303-21	SWITCH, TACTILE (MENU 2)				
S532	1-554-303-21	SWITCH, TACTILE (MENU 3)				
S533	1-554-303-21	SWITCH, TACTILE (MENU 4)				
S534	1-554-303-21	SWITCH, TACTILE (P FILE)				
S535	1-554-303-21	SWITCH, TACTILE (EFFECT ON/OFF)				
S551	1-554-303-21	SWITCH, TACTILE (TUNER/BAND)				
S552	1-554-303-21	SWITCH, TACTILE (FUNCTION)				
S553	1-554-303-21	SWITCH, TACTILE (GROOVE)				
		< VIBRATOR >				
X500	1-579-233-11	VIBRATOR, CERAMIC (5MHz)				

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Ref. No.	Part No.	Description	Remark
*	A-4389-543-A	POWER AMP BOARD, COMPLETE (AEP, UK, G, IT) ***************************************	
*	A-4389-557-A	POWER AMP BOARD, COMPLETE (US, CND) ************************************	
*	A-4389-566-A	POWER AMP BOARD, COMPLETE ***************************	(E, AUS, SP, HK, IA, AR, PX)
*	A-4389-975-A	POWER AMP BOARD, COMPLETE (TH) ******************************	
*	A-4390-000-A	POWER AMP BOARD, COMPLETE (EA, MY) ***********************************	
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	

Ref. No.	Part No.	Description				Remark
		< CAPACITOR >				
C1201	1-124-667-11	ELECT	10uF	20%	100V	(US, CND)
C1201	1-126-963-11	ELECT	4.7uF	20%	50V	(EXCEPT US, CND)
C1202	1-162-292-31	CERAMIC	680PF	10%	50V	
C1203	1-162-286-21	CERAMIC	220PF	10%	50V	
C1204	1-126-967-11	ELECT	47uF	20%	50V	(US, CND)
C1204	1-104-664-11	ELECT	47uF	20%	10V	(EXCEPT US, CND)
C1205	1-126-967-11	ELECT	47uF	20%	50V	
C1206	1-128-560-11	ELECT	22uF	20%	100V	(US, CND)
C1206	1-126-968-11	ELECT	100uF	20%	50V	(EXCEPT US, CND)
C1208	1-126-965-11	ELECT	22uF	20%	50V	
C1210	1-136-495-11	FILM	0.068uF	5%	50V	
C1211	1-136-495-11	FILM	0.068uF	5%	50V	
C1220	1-126-933-11	ELECT	100uF	20%	10V	(US, CND)
C1220	1-126-925-11	ELECT	470uF	20%	10V	(EXCEPT US, CND)
C1225	1-162-284-31	CERAMIC	150PF	10%	50V	
C1226	1-162-284-31	CERAMIC	150PF	10%	50V	
C1231	1-162-284-31	CERAMIC	150PF	10%	50V	
C1232	1-162-284-31	CERAMIC	150PF	10%	50V	
C1235	1-126-933-11	ELECT	100uF	20%	10V	(US, CND)
C1235	1-126-923-11	ELECT	220uF	20%	10V	(EXCEPT US, CND)
C1236	1-126-923-11	ELECT	220uF	20%	10V	
C1237	1-124-925-11	ELECT	2.2uF	20%	100V	
C1238	1-126-933-11	ELECT	100uF	20%	10V	
C1239	1-124-902-00	ELECT	0.47uF	20%	50V	
C1240	1-126-963-11	ELECT	4.7uF	20%	50V	
C1251	1-124-667-11	ELECT	10uF	20%	100V	(US, CND)
C1251	1-126-963-11	ELECT	4.7uF	20%	50V	(EXCEPT US, CND)
C1252	1-162-292-31	CERAMIC	680PF	10%	50V	
C1253	1-162-286-21	CERAMIC	220PF	10%	50V	

Ref. No.	Part No.	Description			Remark
C1254	1-126-967-11	ELECT	47uF	20%	50V (US, CND)
C1254	1-104-664-11	ELECT	47uF	20%	10V (EXCEPT US, CND)
C1255	1-126-967-11	ELECT	47uF	20%	50V
C1256	1-128-560-11	ELECT	22uF	20%	100V (US, CND)
C1256	1-126-968-11	ELECT	100uF	20%	50V (EXCEPT US, CND)
C1260	1-136-495-11	FILM	0.068uF	5%	50V
C1261	1-136-495-11	FILM	0.068uF	5%	50V
C1274	1-164-159-21	CERAMIC	0.1uF		50V
C1275	1-164-159-21	CERAMIC	0.1uF		50V
C1276	1-164-159-21	CERAMIC	0.1uF		50V
C1277	1-164-159-21	CERAMIC	0.1uF		50V
C1278	1-161-494-00	CERAMIC	0.022uF		25V
C1279	1-161-494-00	CERAMIC	0.022uF		25V
C1280	1-164-159-21	CERAMIC	0.1uF		50V
C1281	1-164-159-21	CERAMIC	0.1uF		50V
C1282	1-164-159-21	CERAMIC	0.1uF		50V
C1283	1-164-159-21	CERAMIC	0.1uF		50V
C1284	1-161-494-00	CERAMIC	0.022uF		25V
C1285	1-161-494-00	CERAMIC	0.022uF		25V
C1286	1-128-550-11	ELECT	2200uF	20%	50V
C1287	1-128-550-11	ELECT	2200uF	20%	50V
C1288	1-164-159-21	CERAMIC	0.1uF		50V
C1289	1-164-159-21	CERAMIC	0.1uF		50V
C1290	1-128-493-11	ELECT	4700uF	20%	71V (US, CND)
C1290	1-126-138-11	ELECT	4700uF	20%	50V (AEP, UK, G, IT)
C1290	1-104-482-11	ELECT	4700uF	20%	63V (EXCEPT US, CND, AEP, UK, G, IT)
C1291	1-128-493-11	ELECT	4700uF	20%	71V (US, CND)
C1291	1-126-138-11	ELECT	4700uF	20%	50V (EXCEPT US, CND)
		< CONNECTOR >			
* CN1201	1-766-957-11	CONNECTOR, BOARD TO BOARD 20P			
* CN1202	1-568-937-11	PIN, CONNECTOR 10P			
		< DIODE >			
D1201	8-719-815-85	DIODE 1S1585 (US, CND)			
D1201	8-719-987-63	DIODE 1N4148M (EXCEPT US, CND)			
D1202	8-719-987-63	DIODE 1N4148M			
D1203	8-719-987-63	DIODE 1N4148M			
D1205	8-719-815-85	DIODE 1S1585			
D1206	8-719-815-85	DIODE 1S1585			
D1207	8-719-815-85	DIODE 1S1585			
D1208	8-719-815-85	DIODE 1S1585			

Ref. No.	Part No.	Description	Remark
D1209	8-719-815-85	DIODE 1S1585	
D1230	8-719-987-63	DIODE 1N4148M	
D1231	8-719-987-63	DIODE 1N4148M	
D1232	8-719-987-63	DIODE 1N4148M	
D1240	8-719-815-85	DIODE 1S1585 (US, CND)	
D1240	8-719-987-63	DIODE 1N4148M (EXCEPT US, CND)	
D1251	8-719-815-85	DIODE 1S1585 (US, CND)	
D1251	8-719-987-63	DIODE 1N4148M (EXCEPT US, CND)	
D1270	8-719-987-63	DIODE 1N4148M	
D1271	8-719-987-63	DIODE 1N4148M	
D1274	8-719-987-63	DIODE 1N4148M	
D1275	8-719-987-63	DIODE 1N4148M	
D1276	8-719-987-63	DIODE 1N4148M	
D1277	8-719-987-63	DIODE 1N4148M	
		< GROUND TERMINAL >	
EPT121	1-537-770-21	TERMINAL BOARD, GROUND	
		< IC >	
IC1201	8-749-921-68	IC STK-4231MK2 (US,CND)	
IC1201	8-749-900-34	IC STK-4182MK2 (AEP, UK, G, IT)	
IC1201	8-749-900-78	IC STK-4192MK2 (EXCEPT US, CND, AEP, UK, G, IT)	
IC1202	8-759-111-68	IC UPC1237HA	
		< COIL >	
L1201	1-420-872-00	COIL, AIR-CORE (AEP, UK, G, IT)	
L1202	1-420-872-00	COIL, AIR-CORE (AEP, UK, G, IT)	
L1203	1-420-872-00	COIL, AIR-CORE (AEP, UK, G, IT)	
L1204	1-420-872-00	COIL, AIR-CORE (AEP, UK, G, IT)	
L1205	1-420-872-00	COIL, AIR-CORE (AEP, UK, G, IT)	
		< TRANSISTOR >	
Q1201	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
Q1210	8-729-900-89	TRANSISTOR DTC144ES	
Q1230	8-729-900-89	TRANSISTOR DTC144ES	
Q1240	8-729-900-63	TRANSISTOR DTA124ES	
Q1243	8-729-140-04	TRANSISTOR 2SB1116A-L	
Q1244	8-729-904-39	TRANSISTOR DTC114TS	
Q1245	8-729-140-04	TRANSISTOR 2SB1116A-L	
Q1246	8-729-904-39	TRANSISTOR DTC114TS	
Q1247	8-729-900-80	TRANSISTOR DTC114ES	
Q1248	8-729-140-04	TRANSISTOR 2SB1116A-L	
Q1249	8-729-904-39	TRANSISTOR DTC114TS	
Q1250	8-729-140-04	TRANSISTOR 2SB1116A-L	
Q1251	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
		< RESISTOR >	
R1201	1-249-417-11	CARBON 1K 5% 1/4W	F
R1202	1-249-437-11	CARBON 47K 5% 1/4W	

POWER AMP

Ref.No.	Part No.	Description				Remark
R1203	1-249-415-11	CARBON	680	5%	1/4W	F
R1204	1-249-437-11	CARBON	47K	5%	1/4W	
R1206	1-260-107-11	CARBON	4.7K	5%	1/2W	(US, CND)
R1206	1-260-105-11	CARBON	3.3K	5%	1/2W	(EXCEPT US, CND)
R1208	1-260-107-11	CARBON	4.7K	5%	1/2W	(US, CND)
R1208	1-260-105-11	CARBON	3.3K	5%	1/2W	(EXCEPT US, CND)
⚠R1209	1-212-881-11	FUSIBLE	100	5%	1/4W	F
⚠R1210	1-208-601-11	WIREWOUND	0.1	10%	2W	F (US, CND)
⚠R1210	1-208-602-11	WIREWOUND	0.22	10%	2W	F (EXCEPT US, CND)
R1211	1-249-417-11	CARBON	1K	5%	1/4W	F
R1212	1-247-863-91	CARBON	22K	5%	1/4W	(US, CND)
R1212	1-249-431-11	CARBON	15K	5%	1/4W	(EXCEPT US, CND)
R1213	1-249-441-11	CARBON	100K	5%	1/4W	
R1215	1-260-102-11	CARBON	1.8K	5%	1/2W	(US, CND)
R1215	1-260-099-11	CARBON	1K	5%	1/2W	(EXCEPT US, CND)
R1216	1-260-102-11	CARBON	1.8K	5%	1/2W	(US, CND)
R1216	1-260-099-11	CARBON	1K	5%	1/2W	(EXCEPT US, CND)
R1218	1-260-076-11	CARBON	10	5%	1/2W	
R1220	1-249-437-11	CARBON	47K	5%	1/4W	
R1221	1-249-437-11	CARBON	47K	5%	1/4W	
R1222	1-249-440-11	CARBON	82K	5%	1/4W	
R1223	1-249-440-11	CARBON	82K	5%	1/4W	
R1224	1-249-437-11	CARBON	47K	5%	1/4W	
R1227	1-249-429-11	CARBON	10K	5%	1/4W	
R1228	1-247-893-11	CARBON	390K	5%	1/4W	(US, CND)
R1228	1-247-883-00	CARBON	150K	5%	1/4W	(EXCEPT US, CND)
R1229	1-249-429-11	CARBON	10K	5%	1/4W	
R1230	1-249-438-11	CARBON	56K	5%	1/4W	(US, CND)
R1230	1-249-429-11	CARBON	10K	5%	1/4W	(EXCEPT US, CND)
R1231	1-249-429-11	CARBON	10K	5%	1/4W	
R1232	1-249-441-11	CARBON	100K	5%	1/4W	
R1233	1-249-437-11	CARBON	47K	5%	1/4W	(US, CND)
R1233	1-249-435-11	CARBON	33K	5%	1/4W	(EXCEPT US, CND)
R1234	1-247-791-91	CARBON	22	5%	1/4W	
R1235	1-247-854-11	CARBON	9.1K	5%	1/4W	(US, CND)
R1235	1-249-425-11	CARBON	4.7K	5%	1/4W	F (EXCEPT US, CND)
R1236	1-247-854-11	CARBON	9.1K	5%	1/4W	(US, CND)
R1236	1-249-425-11	CARBON	4.7K	5%	1/4W	F (EXCEPT US, CND)
R1237	1-249-429-11	CARBON	10K	5%	1/4W	
R1238	1-247-863-91	CARBON	22K	5%	1/4W	
R1239	1-247-863-91	CARBON	22K	5%	1/4W	
R1240	1-249-441-11	CARBON	100K	5%	1/4W	
R1243	1-249-439-11	CARBON	68K	5%	1/4W	
R1244	1-249-437-11	CARBON	47K	5%	1/4W	
R1245	1-249-439-11	CARBON	68K	5%	1/4W	
R1246	1-249-437-11	CARBON	47K	5%	1/4W	
⚠R1250	1-217-637-00	FUSIBLE	1	5%	1/4W	F
R1251	1-249-417-11	CARBON	1K	5%	1/4W	F
R1252	1-249-437-11	CARBON	47K	5%	1/4W	
R1253	1-249-415-11	CARBON	680	5%	1/4W	F
R1254	1-249-437-11	CARBON	47K	5%	1/4W	
R1256	1-260-107-11	CARBON	4.7K	5%	1/2W	(US, CND)
R1256	1-260-105-11	CARBON	3.3K	5%	1/2W	(EXCEPT US, CND)
R1258	1-260-107-11	CARBON	4.7K	5%	1/2W	(US, CND)
R1258	1-260-105-11	CARBON	3.3K	5%	1/2W	(EXCEPT US, CND)
⚠R1259	1-212-881-11	FUSIBLE	100	5%	1/4W	F
⚠R1260	1-208-601-11	WIREWOUND	0.1	10%	2W	F (US, CND)
⚠R1260	1-208-602-11	WIREWOUND	0.22	10%	2W	F (EXCEPT US,CND)
R1261	1-249-417-11	CARBON	1K	5%	1/4W	F
R1262	1-247-863-91	CARBON	22K	5%	1/4W	(US,CND)
R1262	1-249-431-11	CARBON	15K	5%	1/4W	(EXCEPT US,CND)
R1263	1-249-441-11	CARBON	100K	5%	1/4W	
R1264	1-249-389-11	CARBON	4.7	5%	1/4W	F (AEP, UK, G, IT)
R1265	1-249-389-11	CARBON	4.7	5%	1/4W	F (AEP, UK, G, IT)
R1266	1-249-393-11	CARBON	10	5%	1/4W	F
R1268	1-260-076-11	CARBON	10	5%	1/2W	
R1269	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R1270	1-249-429-11	CARBON	10K	5%	1/4W	
R1271	1-249-429-11	CARBON	10K	5%	1/4W	
R1272	1-260-093-11	CARBON	330	5%	1/2W	
R1273	1-260-093-11	CARBON	330	5%	1/2W	
R1274	1-260-093-11	CARBON	330	5%	1/2W	
R1275	1-260-093-11	CARBON	330	5%	1/2W	

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Ref. No.	Part No.	Description			Remark
R1276	1-249-389-11	CARBON	4.7	5%	1/4W F (AEP, UK, G, IT)
R1277	1-249-389-11	CARBON	4.7	5%	1/4W F (AEP, UK, G, IT)
R1278	1-249-389-11	CARBON	4.7	5%	1/4W F (AEP, UK, G, IT)
R1279	1-249-389-11	CARBON	4.7	5%	1/4W F (AEP, UK, G, IT)
R1280	1-249-393-11	CARBON	10	5%	1/4W F
R1281	1-249-393-11	CARBON	10	5%	1/4W F
R1282	1-249-389-11	CARBON	4.7	5%	1/4W F (AEP, UK, G, IT)
R1283	1-249-389-11	CARBON	4.7	5%	1/4W F (AEP, UK, G, IT)
R1284	1-249-389-11	CARBON	4.7	5%	1/4W F (AEP, UK, G, IT)
R1285	1-249-389-11	CARBON	4.7	5%	1/4W F (AEP, UK, G, IT)
R1286	1-249-393-11	CARBON	10	5%	1/4W F
R1287	1-249-393-11	CARBON	10	5%	1/4W F
R1288	1-249-425-11	CARBON	4.7K	5%	1/4W F
R1289	1-249-420-11	CARBON	1.8K	5%	1/4W F
⚠R1290	1-216-454-11	METAL OXIDE	390	5%	2W F
⚠R1291	1-216-454-11	METAL OXIDE	390	5%	2W F
R1292	1-249-425-11	CARBON	4.7K	5%	1/4W F
R1293	1-249-420-11	CARBON	1.8K	5%	1/4W F
⚠R1294	1-216-454-11	METAL OXIDE	390	5%	2W F
⚠R1295	1-216-454-11	METAL OXIDE	390	5%	2W F
R1296	1-249-425-11	CARBON	4.7K	5%	1/4W F
R1297	1-249-420-11	CARBON	1.8K	5%	1/4W F
R1298	1-249-420-11	CARBON	1.8K	5%	1/4W F
		< RELAY >			
RY1201	1-755-141-11	RELAY (US, CND)			
RY1201	1-755-142-11	RELAY (EXCEPT US, CND)			
RY1202	1-755-142-11	RELAY			
RY1203	1-755-142-11	RELAY			
RY1204	1-755-142-11	RELAY			
		< TERMINAL >			
TM1201	1-537-842-11	TERMINAL BOARD (FRONT SPEAKER)			
TM1202	1-537-842-11	TERMINAL BOARD (REAR SPEAKER)			
TM1203	1-537-842-11	TERMINAL BOARD (CENTER SPEAKER)			

****

* 1-658-576-11 SENSOR BOARD
****

Ref. No.	Part No.	Description
		< IC >
IC702	8-749-924-18	IC PHOTO INTERRUPTER RPI-1391
IC703	8-749-924-30	IC PHOTO REFLECTOR GP2S28

Ref. No.	Part No.	Description			Remark
		< RESISTOR >			
R701	1-249-416-11	CARBON	820	5%	1/4W F
R702	1-249-407-11	CARBON	150	5%	1/4W F

****

* 1-659-623-11 SENSOR (FAN) BOARD
****

Ref. No.	Part No.	Description		Remark
		< CAPACITOR >		
C1295	1-164-159-21	CERAMIC	0.1uF	50V
		< CONNECTOR >		
* CN1295	1-564-337-00	PIN, CONNECTOR 3P		
		< IC >		
IC1295	8-759-947-34	IC LM35DZ		

****

* A-4389-546-A SURROUND AMPLIFIER BOARD, COMPLETE
****
(AEP, UK, G, IT)

* A-4389-568-A SURROUND AMPLIFIER BOARD, COMPLETE
****
(US, CND, E, AUS, SP, HK, IA, AR, PX)

* A-4389-978-A SURROUND AMPLIFIER BOARD, COMPLETE (TH)
****

* A-4390-002-A SURROUND AMPLIFIER BOARD, COMPLETE
****
(EA,MY)

Ref. No.	Part No.	Description			Remark
		< CAPACITOR >			
C1301	1-126-963-11	ELECT	4.7uF	20%	50V
C1302	1-162-292-31	CERAMIC	680PF	10%	50V
C1303	1-162-286-21	CERAMIC	220PF	10%	50V
C1304	1-126-967-11	ELECT	47uF	20%	50V
C1305	1-126-967-11	ELECT	47uF	20%	50V
C1306	1-126-968-11	ELECT	100uF	20%	50V
C1308	1-126-965-11	ELECT	22uF	20%	50V
C1310	1-136-495-11	FILM	0.068uF	5%	50V
C1311	1-136-495-11	FILM	0.068uF	5%	50V
C1320	1-126-923-11	ELECT	220uF	20%	10V
C1325	1-162-284-31	CERAMIC	150PF	10%	50V
C1326	1-162-284-31	CERAMIC	150PF	10%	50V (AEP, UK, G, IT)
C1351	1-126-963-11	ELECT	4.7uF	20%	50V
C1352	1-162-292-31	CERAMIC	680PF	10%	50V
C1353	1-162-286-21	CERAMIC	220PF	10%	50V

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SURROUND AMPLIFIER

TC-SW

Ref. No.	Part No.	Description			Remark	
C1354	1-126-967-11	ELECT	47uF	20%	50V	
C1355	1-126-967-11	ELECT	47uF	20%	50V	
C1356	1-126-968-11	ELECT	100uF	20%	50V	
C1360	1-136-495-11	FILM	0.068uF	5%	50V	
C1361	1-136-495-11	FILM	0.068uF	5%	50V	
		< CONNECTOR >				
CN1301	1-691-765-11	PLUG (MICRO CONNECTOR) 3P				
CN1302	1-691-771-11	PLUG (MICRO CONNECTOR) 9P				
CN1303	1-691-766-11	PLUG (MICRO CONNECTOR) 4P				
		< DIODE >				
D1241	8-719-987-63	DIODE 1N4148M				
D1242	8-719-987-63	DIODE 1N4148M				
D1301	8-719-987-63	DIODE 1N4148M				
D1302	8-719-987-63	DIODE 1N4148M				
D1303	8-719-987-63	DIODE 1N4148M				
D1351	8-719-987-63	DIODE 1N4148M				
		< GROUND TERMINAL >				
EPT131	1-537-770-21	TERMINAL BOARD, GROUND				
EPT132	1-537-770-21	TERMINAL BOARD, GROUND (AEP, UK, G, IT)				
		< IC >				
IC1301	8-749-900-96	IC STK-4142MK2				
		< TRANSISTOR >				
Q1242	8-729-900-80	TRANSISTOR DTC114ES				
Q1301	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA				
Q1351	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA				
Q1353	8-729-900-89	TRANSISTOR DTC144ES				
		< RESISTOR >				
R1225	1-249-429-11	CARBON	10K	5%	1/4W	
R1301	1-249-417-11	CARBON	1K	5%	1/4W	F
R1302	1-249-437-11	CARBON	47K	5%	1/4W	
R1303	1-249-415-11	CARBON	680	5%	1/4W	F
R1304	1-249-437-11	CARBON	47K	5%	1/4W	
R1305	1-260-103-11	CARBON	2.2K	5%	1/2W	
R1306	1-260-103-11	CARBON	2.2K	5%	1/2W	
⚠R1309	1-212-881-11	FUSIBLE	100	5%	1/4W	F
⚠R1310	1-208-602-11	WIREWOUND	0.22	10%	2W	F
R1311	1-249-417-11	CARBON	1K	5%	1/4W	F
R1312	1-249-431-11	CARBON	15K	5%	1/4W	
R1313	1-249-441-11	CARBON	100K	5%	1/4W	
R1314	1-260-099-11	CARBON	1K	5%	1/2W	
R1316	1-260-099-11	CARBON	1K	5%	1/2W	
R1318	1-260-076-11	CARBON	10	5%	1/2W	
R1327	1-249-429-11	CARBON	10K	5%	1/4W	
R1328	1-247-881-00	CARBON	120K	5%	1/4W	

Ref. No.	Part No.	Description			Remark	
R1330	1-249-429-11	CARBON	10K	5%	1/4W	
R1342	1-249-429-11	CARBON	10K	5%	1/4W	
R1343	1-249-429-11	CARBON	10K	5%	1/4W	
⚠R1344	1-217-637-00	FUSIBLE	1	5%	1/4W	F
R1351	1-249-417-11	CARBON	1K	5%	1/4W	F
R1352	1-249-437-11	CARBON	47K	5%	1/4W	
R1353	1-249-415-11	CARBON	680	5%	1/4W	F
R1354	1-249-437-11	CARBON	47K	5%	1/4W	
R1355	1-260-103-11	CARBON	2.2K	5%	1/2W	
R1356	1-260-103-11	CARBON	2.2K	5%	1/2W	
⚠R1359	1-212-881-11	FUSIBLE	100	5%	1/4W	F
⚠R1360	1-208-602-11	WIREWOUND	0.22	10%	2W	F
R1361	1-249-417-11	CARBON	1K	5%	1/4W	F
R1362	1-249-431-11	CARBON	15K	5%	1/4W	
R1363	1-249-441-11	CARBON	100K	5%	1/4W	
R1368	1-260-076-11	CARBON	10	5%	1/2W	

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*	A-4389-030-A	TC-SW BOARD, COMPLETE (Malaysia product)				
		************************************				
*	A-4389-363-A	TC-SW BOARD, COMPLETE (Thailand product)				
		************************************				
*	A-4389-541-A	TC-SW BOARD, COMPLETE (Indonesia product)				
		**************************************				
		< DIODE >				
D523	8-719-032-87	DIODE SEL5420S-TP (◁ DECK B)				
D524	8-719-032-87	DIODE SEL5420S-TP (▷ DECK B)				
D525	8-719-057-09	DIODE LNJ801LPDJA (● REC)				
D526	8-719-058-17	DIODE LNJ401NPYJA (❚❚ PAUSE)				
D527	8-719-032-87	DIODE SEL5420S-TP (◁ DECK A)				
D528	8-719-032-87	DIODE SEL5420S-TP (▷ DECK A)				
		< RESISTOR >				
R553	1-247-815-91	CARBON	220	5%	1/4W	
R554	1-249-411-11	CARBON	330	5%	1/4W	
R555	1-249-413-11	CARBON	470	5%	1/4W	F
R556	1-249-415-11	CARBON	680	5%	1/4W	F
R557	1-249-417-11	CARBON	1K	5%	1/4W	F
R558	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R559	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R560	1-249-423-11	CARBON	3.3K	5%	1/4W	F
R561	1-249-427-11	CARBON	6.8K	5%	1/4W	F
R562	1-249-431-11	CARBON	15K	5%	1/4W	
R568	1-249-413-11	CARBON	470	5%	1/4W	F
R569	1-249-415-11	CARBON	680	5%	1/4W	F
R570	1-249-417-11	CARBON	1K	5%	1/4W	F
R571	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R572	1-249-421-11	CARBON	2.2K	5%	1/4W	F

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Ref. No.	Part No.	Description				Remark
R573	1-249-423-11	CARBON	3.3K	5%	1/4W	F
R574	1-249-427-11	CARBON	6.8K	5%	1/4W	F
R610	1-247-807-31	CARBON	100	5%	1/4W	
R611	1-247-807-31	CARBON	100	5%	1/4W	
R612	1-249-407-11	CARBON	150	5%	1/4W	F
R613	1-249-407-11	CARBON	150	5%	1/4W	F
R614	1-247-807-31	CARBON	100	5%	1/4W	
R615	1-247-807-31	CARBON	100	5%	1/4W	
		< SWITCH >				
S536	1-554-303-21	SWITCH, TACTILE (▷ DECK B)				
S537	1-554-303-21	SWITCH, TACTILE (◁ DECK B)				
S538	1-554-303-21	SWITCH, TACTILE (▶▶ DECK B)				
S539	1-554-303-21	SWITCH, TACTILE (■ DECK B)				
S540	1-554-303-21	SWITCH, TACTILE (◀◀ DECK B)				
S541	1-554-303-21	SWITCH, TACTILE (❚❚ PAUSE)				
S542	1-554-303-21	SWITCH, TACTILE (● REC)				
S543	1-554-303-21	SWITCH, TACTILE (KARAOKE PON/MPX)				
S544	1-554-303-21	SWITCH, TACTILE (CD SYNCRO)				
S545	1-554-303-21	SWITCH, TACTILE (HIGH SPEED DUBBING)				
S554	1-554-303-21	SWITCH, TACTILE (DIRECTION)				
S555	1-554-303-21	SWITCH, TACTILE (DOLBY NR)				
S556	1-554-303-21	SWITCH, TACTILE (▶▶ DECK A)				
S557	1-554-303-21	SWITCH, TACTILE (■ DECK A)				
S558	1-554-303-21	SWITCH, TACTILE (◀◀ DECK A)				
S559	1-554-303-21	SWITCH, TACTILE (▷ DECK A)				
S560	1-554-303-21	SWITCH, TACTILE (◁ DECK A)				

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* A-4303-510-A TCB BOARD, COMPLETE (US, CND)
****

* A-4303-512-A TCB BOARD,COMPLETE (E2, AR, AUS)
****

* A-4303-537-A TCB BOARD,COMPLETE (TH)
****

Ref. No.	Part No.	Description				Remark
		< CAPACITOR >				
C1	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C2	1-104-664-11	ELECT	47uF	20%	16V (TH)	
C2	1-126-967-11	ELECT	47uF	20%	16V	(EXCEPT TH)
C3	1-164-159-21	CERAMIC	0.1uF		50V	
C5	1-162-306-11	CERAMIC	10000PF	30%	16V	
C6	1-162-306-11	CERAMIC	10000PF	30%	16V	
C7	1-101-004-00	CERAMIC	0.01uF		50V	
C8	1-162-306-11	CERAMIC	10000PF	30%	16V	
C9	1-162-306-11	CERAMIC	10000PF	30%	16V	
C11	1-164-159-21	CERAMIC	0.1uF		50V	
C12	1-162-198-31	CERAMIC	8.2PF	10%	50V	
C14	1-162-306-11	CERAMIC	10000PF	30%	16V	
C21	1-102-959-00	CERAMIC	22PF	5%	50V	(EXCEPT TH)
C21	1-102-960-00	CERAMIC	24PF	5%	16V (TH)	
C22	1-164-159-21	CERAMIC	0.1uF		50V	
C23	1-162-306-11	CERAMIC	10000PF	30%	16V	
C24	1-104-664-11	ELECT	47uF	20%	16V (TH)	
C24	1-126-967-11	ELECT	47uF	20%	16V	(EXCEPT TH)
C25	1-162-306-11	CERAMIC	10000PF	30%	16V	
C26	1-126-964-11	ELECT	10uF	20%	50V	
C27	1-164-159-21	CERAMIC	0.1uF		50V	
C28	1-124-925-11	ELECT	2.2uF	20%	100V	
C29	1-102-518-11	CERAMIC	33PF	5%	50V	(EXCEPT TH)
C29	1-102-960-00	CERAMIC	24PF	5%	16V (TH)	
C30	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C31	1-162-306-11	CERAMIC	10000PF	30%	16V	
C41	1-126-933-11	ELECT	100uF	20%	10V	
C42	1-162-306-11	CERAMIC	10000PF	30%	16V	
C43	1-126-962-11	ELECT	3.3uF	20%	50V	
C44	1-162-306-11	CERAMIC	10000PF	30%	16V	
C45	1-124-589-11	ELECT	47uF	20%	16V	
C46	1-162-600-11	CERAMIC	4700PF	30%	16V	
C47	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C48	1-126-160-11	ELECT	1uF	20%	50V	
C49	1-136-159-00	METALIZED FILM	0.033uF	5%	50V	(EXCEPT US, CND)
C49	1-136-160-00	METALIZED FILM	0.039uF	5%	50V	(US, CND)
C50	1-136-159-00	METALIZED FILM	0.033uF	5%	50V	(EXCEPT US, CND)
C50	1-136-160-00	METALIZED FILM	0.039uF	5%	50V	(US, CND)
C51	1-162-600-11	CERAMIC	4700PF	30%	16V	
C52	1-162-600-11	CERAMIC	4700PF	30%	16V	
C53	1-126-964-11	ELECT	10uF	20%	50V	
C54	1-126-157-11	ELECT	10uF	20%	16V	
C55	1-126-964-11	ELECT	10uF	20%	50V	
C56	1-126-964-11	ELECT	10uF	20%	50V	
C57	1-164-159-21	CERAMIC	0.1uF		50V	F
C58	1-162-306-11	CERAMIC	10000PF	30%	16V	
C59	1-164-159-21	CERAMIC	0.1uF		50V	F
C61	1-164-159-21	CERAMIC	0.1uF		50V	F
C62	1-104-664-11	ELECT	47uF	20%	16V (TH)	
C62	1-126-967-11	ELECT	47uF	20%	16V	(EXCEPT TH)
C63	1-164-159-21	CERAMIC	0.1uF		50V	F
C64	1-124-902-00	ELECT	0.47uF	20%	50V	
C65	1-124-903-11	ELECT	1.0uF	20%	50V	
C66	1-124-903-11	ELECT	1.0uF	20%	50V	
C67	1-126-964-11	ELECT	10uF	20%	50V	

TCB

Ref. No.	Part No.	Description			Remark	
C68	1-162-306-11	CERAMIC	10000PF	30%	16V	
C69	1-162-306-11	CERAMIC	10000PF	30%	16V	
C70	1-162-306-11	CERAMIC	10000PF	30%	16V	
C71	1-162-306-11	CERAMIC	10000PF	30%	16V	
C73	1-162-306-11	CERAMIC	10000PF	30%	16V	
C74	1-126-964-11	ELECT	10uF	20%	50V	
		< FILTER >				
CF1	1-567-389-11	FILTER, CERAMIC				
CF2	1-567-389-11	FILTER, CERAMIC				
		< CONNECTOR >				
* CN1	1-568-832-11	SOCKET, CONNECTOR 13P				
		< DIODE >				
D1	8-719-933-33	DIODE HZS6A1L				
D2	8-719-987-63	DIODE 1N4148M				
		< FRONTEND >				
FE1	1-233-533-11	ENCAPSULATED COMPONENT				
FE2	1-239-260-11	ENCAPSULATED COMPONENT				
		< IC >				
IC1	8-759-288-54	IC LC72130				
IC2	8-759-176-03	IC LA1835				
		< IFT >				
IFT41	1-409-636-11	TRANSFORMER, IF (CERAMIC FILTER)				
		< COIL >				
L41	1-410-119-11	MICRO INDUCTOR (EL TYPE) 1mH				
		< FILTER >				
LPF41	1-239-845-11	FILTER, LOW PASS				
LPF42	1-239-845-11	FILTER, LOW PASS				
		< TRANSISTOR >				
Q1	8-729-230-99	TRANSISTOR 2SC2669-OY				
Q2	8-729-230-99	TRANSISTOR 2SC2669-OY				
Q3	8-729-230-99	TRANSISTOR 2SC2669-OY				
Q4	8-729-230-99	TRANSISTOR 2SC2669-OY				
Q5	8-729-422-57	TRANSISTOR UN4111				
		< RESISTOR >				
R1	1-249-401-11	CARBON	47	5%	1/4W	F
R2	1-249-411-11	CARBON	330	5%	1/4W	
R3	1-249-411-11	CARBON	330	5%	1/4W	
R5	1-249-411-11	CARBON	330	5%	1/4W	
R6	1-247-863-91	CARBON	22K	5%	1/4W	

Ref. No.	Part No.	Description				Remark
R7	1-249-411-11	CARBON	330	5%	1/4W	
R8	1-249-411-11	CARBON	330	5%	1/4W	
R9	1-247-863-91	CARBON	22K	5%	1/4W	
R10	1-249-411-11	CARBON	330	5%	1/4W	
R11	1-247-863-91	CARBON	22K	5%	1/4W	
R12	1-249-411-11	CARBON	330	5%	1/4W	
R13	1-249-411-11	CARBON	330	5%	1/4W	
R14	1-247-863-91	CARBON	22K	5%	1/4W	
R15	1-249-429-11	CARBON	10K	5%	1/4W	
R16	1-249-437-11	CARBON	47K	5%	1/4W	
R19	1-249-399-11	CARBON	33	5%	1/4W	F
R21	1-247-807-31	CARBON	100	5%	1/4W	
R22	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R23	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R24	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R25	1-247-807-31	CARBON	100	5%	1/4W	
R26	1-249-411-11	CARBON	330	5%	1/4W	
R27	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R28	1-249-423-11	CARBON	3.3K	5%	1/4W	F
R29	1-249-417-11	CARBON	1K	5%	1/4W	F
R30	1-249-417-11	CARBON	1K	5%	1/4W	F
R31	1-249-417-11	CARBON	1K	5%	1/4W	F
R32	1-249-417-11	CARBON	1K	5%	1/4W	F
R33	1-247-807-31	CARBON	100	5%	1/4W	
R34	1-249-429-11	CARBON	10K	5%	1/4W	
R35	1-249-429-11	CARBON	10K	5%	1/4W	
R36	1-249-437-11	CARBON	47K	5%	1/4W	
R37	1-249-417-11	CARBON	1K	5%	1/4W	F
R41	1-249-429-11	CARBON	10K	5%	1/4W	
R43	1-249-423-11	CARBON	3.3K	5%	1/4W	F
R44	1-249-423-11	CARBON	3.3K	5%	1/4W	F
R46	1-249-442-11	CARBON	510	5%	1/4W	
R47	1-249-399-11	CARBON	33	5%	1/4W	F
R48	1-249-423-11	CARBON	3.3K	5%	1/4W	F
R49	1-249-393-11	CARBON	10	5%	1/4W	F
R50	1-249-429-11	CARBON	10K	5%	1/4W	
R51	1-249-441-11	CARBON	100K	5%	1/4W	
R52	1-249-429-11	CARBON	10K	5%	1/4W	
R53	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R54	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R99	1-249-399-11	CARBON	33K	5%	1/4W	F
		< VARIABLE RESISTOR >				
RV41	1-238-600-11	RES, ADJ, CARBON 10K				
RV42	1-238-601-11	RES, ADJ, CARBON 22K				
		< TERMINAL >				
TM1	1-537-238-21	TERMINAL BOARD (ANTENNA)				

Ref. No.	Part No.	Description	Remark
		< VIBRATOR >	
X21	1-567-713-11	VIBRATOR, CRYSTAL (4.5MHz) (TH)	
X21	1-760-549-11	VIBRATOR, CRYSTAL (4.5MHz) (EXCEPT TH)	
X41	1-577-075-11	OSCILLATOR, CERAMIC (456KHz)	
X42	1-760-220-11	FILTER, CERAMIC (10.7MHz)	
X43	1-527-981-00	FILTER, CERAMIC (450KHz)	

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Ref. No.	Part No.	Description			Remark
*	A-4303-502-A	TCB BOARD, COMPLETE ********************			
		(Indonesia product) (AEP, UK)			
*	A-4303-503-A	TCB BOARD, COMPLETE (G, IT) **************************			
*	A-4303-514-A	TCB BOARD, COMPLETE (Malaysia product) (AEP) **			
		< CAPACITOR >			
C1	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C2	1-126-967-11	ELECT	47uF	20%	16V
C3	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C5	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C6	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C8	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C9	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C10	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C11	1-216-295-91	CONDUCTOR, CHIP (2012)			(G, IT)
C16	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C19	1-163-249-11	CERAMIC CHIP	82PF	5%	50V (AEP, UK)
C21	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C22	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C23	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C24	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C26	1-126-967-11	ELECT	47uF	20%	16V
C28	1-126-967-11	ELECT	47uF	20%	16V
C29	1-162-306-11	CERAMIC	0.01uF	30%	16V
C30	1-124-925-11	ELECT	2.2uF	20%	100V
C31	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C32	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C33	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C34	1-163-091-00	CERAMIC CHIP	8PF		50V (G,IT)
C34	1-163-229-11	CERAMIC CHIP	12PF	5%	50V (AEP, UK)
C35	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C36	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C37	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C39	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C40	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C41	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C42	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C43	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C44	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C45	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C46	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C47	1-126-967-11	ELECT	47uF	20%	16V
C48	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C49	1-124-902-00	ELECT	0.47uF	20%	50V
C50	1-124-903-11	ELECT	1.0uF	20%	50V
C51	1-124-903-11	ELECT	1.0uF	20%	50V
C52	1-126-964-11	ELECT	10uF	20%	50V
C53	1-126-964-11	ELECT	10uF	20%	50V
C54	1-126-157-11	ELECT	10uF	20%	16V
C55	1-126-157-11	ELECT	10uF	20%	16V
C56	1-126-157-11	ELECT	10uF	20%	16V
C57	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C58	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C59	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C60	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C61	1-126-301-11	ELECT	1uF	20%	50V
C62	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C63	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C64	1-126-967-11	ELECT	47uF	20%	16V
C65	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C66	1-126-162-11	ELECT	3.3uF	20%	50V
C67	1-126-933-11	ELECT	100uF	20%	10V
C68	1-162-306-11	CERAMIC	0.01uF	30%	16V
C71	1-162-306-11	CERAMIC	0.01uF	30%	16V
C72	1-126-967-11	ELECT	47uF	20%	16V
C120	1-163-105-00	CERAMIC CHIP	33PF	5%	50V
		< FILTER >			
CF1	1-579-374-71	FILTER, CERAMIC			
CF2	1-760-393-11	FILTER, CERAMIC			
CF3	1-760-393-11	FILTER, CERAMIC			
		< CONNECTOR >			
* CN1	1-568-834-11	SOCKET, CONNECTOR 15P			
		< DIODE >			
D21	8-719-976-99	DIODE DTZ5.1B			
D41	8-719-016-74	DIODE 1SS352			
		< FRONTEND >			
FE1	1-233-542-11	FRONT END (4 GANG)			
FE2	1-233-514-11	ENCAPSULATED COMPONENT (AEP,UK)			
FE2	1-239-260-11	ENCAPSULATED COMPONENT (G,IT)			
		< IC >			
IC21	8-759-288-54	IC LC72130			

TCB

Ref. No.	Part No.	Description	Remark
IC41	8-759-176-03	IC LA1835	
		< IFT >	
IFT41	1-409-636-11	TRANSFORMER, IF (CERAMIC FILTER)	
		< JUMPER RESISTOR >	
JR1	1-216-295-91	METAL CHIP 0 5% 1/10W	(G, IT)
JR2	1-216-295-91	METAL CHIP 0 5% 1/10W	(AEP, UK)
JR3	1-216-295-91	METAL CHIP 0 5% 1/10W	(G, IT)
JR6	1-216-295-91	METAL CHIP 0 5% 1/10W	
JR7	1-216-295-91	METAL CHIP 0 5% 1/10W	(G, IT)
JR8	1-216-295-91	METAL CHIP 0 5% 1/10W	(AEP, UK)
JR9	1-216-295-91	METAL CHIP 0 5% 1/10W	(AEP, UK)
JR45	1-216-295-91	METAL CHIP 0 5% 1/10W	
JR46	1-216-296-91	METAL CHIP 0 5% 1/8W	
JR47	1-216-295-91	METAL CHIP 0 5% 1/10W	
JR48	1-216-295-91	METAL CHIP 0 5% 1/10W	
JR49	1-216-296-91	METAL CHIP 0 5% 1/8W	
JR51	1-216-295-91	METAL CHIP 0 5% 1/10W	(AEP, UK)
JR52	1-216-295-91	METAL CHIP 0 5% 1/10W	
JR53	1-216-296-91	METAL CHIP 0 5% 1/8W	(AEP, UK)
JR54	1-216-295-91	METAL CHIP 0 5% 1/10W	
		< JUMPER RESISTOR >	
JW4	1-249-413-11	CARBON 470 5% 1/4W	
JW5	1-249-413-11	CARBON 470 5% 1/4W	
		< COIL >	
L2	1-414-142-11	MICRO INDUCTOR 1uH	
L3	1-410-521-11	MICRO INDUCTOR 100uH	
L4	1-410-515-11	INDUCTOR 33uH	
L41	1-407-500-00	MICRO INDUCTOR 4.7mH (AEP, UK)	
L41	1-410-119-11	MICRO INDUCTOR (EL TYPE) 1mH (G, IT)	
		< FILTER >	
LPF41	1-239-845-11	FILTER, LOW PASS	
LPF42	1-239-845-11	FILTER, LOW PASS	
		< TRANSISTOR >	
Q1	8-729-201-27	TRANSISTOR 2SC2715Y	
Q2	8-729-201-27	TRANSISTOR 2SC2715Y	
Q3	8-729-201-27	TRANSISTOR 2SC2715Y	
Q4	8-729-201-27	TRANSISTOR 2SC2715Y	

Ref. No.	Part No.	Description	Remark
Q5	8-729-424-08	TRANSISTOR UN2111	
Q9	8-729-216-22	TRANSISTOR 2SA1162-G (AEP, UK)	
Q11	8-729-421-22	TRANSISTOR UN2211 (AEP, UK)	
Q12	8-729-421-22	TRANSISTOR UN2211 (AEP, UK)	
Q13	8-729-421-22	TRANSISTOR UN2211 (AEP, UK)	
Q14	8-729-421-22	TRANSISTOR UN2211 (AEP, UK)	
		< RESISTOR >	
R1	1-249-401-11	CARBON 47 5% 1/4W	F
R2	1-216-037-00	METAL CHIP 330 5% 1/10W	
R3	1-216-037-00	METAL CHIP 330 5% 1/10W	
R5	1-216-037-00	METAL CHIP 330 5% 1/10W	
R6	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R7	1-216-037-00	METAL CHIP 330 5% 1/10W	
R8	1-216-037-00	METAL CHIP 330 5% 1/10W	
R9	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R10	1-216-037-00	METAL CHIP 330 5% 1/10W	
R11	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R12	1-216-037-00	METAL CHIP 330 5% 1/10W	
R13	1-216-037-00	METAL CHIP 330 5% 1/10W	
R14	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R18	1-216-073-00	METAL CHIP 10K 5% 1/10W	(AEP, UK)
R19	1-216-073-00	METAL CHIP 10K 5% 1/10W	(AEP, UK)
R21	1-216-049-91	METAL CHIP 1.0K 5% 1/10W	
R22	1-216-049-91	METAL CHIP 1.0K 5% 1/10W	
R23	1-216-049-91	METAL CHIP 1.0K 5% 1/10W	
R24	1-216-025-91	METAL CHIP 100 5% 1/10W	
R25	1-249-417-11	CARBON 1K 5% 1/4W	F
R26	1-249-437-11	CARBON 47K 5% 1/4W	
R27	1-249-429-11	CARBON 10K 5% 1/4W	
R28	1-249-417-11	CARBON 1K 5% 1/4W	F
R29	1-216-061-00	METAL CHIP 3.3K 5% 1/10W	
R30	1-216-186-00	METAL CHIP 330 5% 1/8W	
R31	1-216-025-91	METAL CHIP 100 5% 1/10W	
R32	1-249-425-11	CARBON 4.7K 5% 1/4W	F
R33	1-249-425-11	CARBON 4.7K 5% 1/4W	F
R34	1-216-065-00	METAL CHIP 4.7K 5% 1/10W	
R35	1-216-214-00	METAL CHIP 4.7K 5% 1/8W	
R36	1-216-025-11	METAL CHIP 100 5% 1/10W	
R37	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R38	1-216-089-11	METAL CHIP 47K 5% 1/10W	
R39	1-249-429-11	CARBON 10K 5% 1/4W	
R42	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R43	1-216-042-00	METAL CHIP 510 5% 1/10W	
R44	1-216-013-00	METAL CHIP 33 5% 1/10W	
R45	1-249-423-11	CARBON 3.3K 5% 1/4W	F
R46	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R47	1-216-097-91	METAL CHIP 100K 5% 1/10W	

Ref. No.	Part No.	Description				Remark
R48	1-249-417-11	CARBON	1K	5%	1/4W	F
R49	1-216-049-91	METAL CHIP	1.0K	5%	1/10W	
R50	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R51	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R53	1-249-429-11	CARBON	10K	5%	1/4W	
R55	1-216-162-00	METAL CHIP	33	5%	1/8W	
R56	1-249-393-11	CARBON	10	5%	1/4W	F
R91	1-216-295-91	METAL CHIP	0	5%	1/10W (AEP, UK)	
R92	1-216-073-00	METAL CHIP	10K	5%	1/10W (AEP, UK)	
R99	1-249-399-11	CARBON	33	5%	1/4W	F

< VARIABLE RESISTOR >

RV41	1-238-601-11	RES, ADJ, CARBON 22K
RV42	1-238-600-11	RES, ADJ, CARBON 10K

< TERMINAL >

TM1	1-537-488-11	TERMINAL BOARD (ANT) (ANTENNA)

< VIBRATOR >

X21	1-760-549-11	VIBRATOR, CRYSTAL (4.5MHz)
X41	1-760-220-11	FILTER, CERAMIC (10.7MHz)
X42	1-527-981-00	FILTER, CERAMIC (450KHz)
X43	1-577-075-11	OSCILLATOR, CERAMIC (456KHz)

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*	A-4303-506-A	TCB BOARD, COMPLETE (E3, HK, SP, IA, PX)

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*	A-4303-518-A	TCB BOARD, COMPLETE (EA, MY)

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< CAPACITOR >

C1	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C2	1-126-967-11	ELECT	47uF	20%	16V
C3	1-163-038-91	CERAMIC CHIP	100000PF		25V
C5	1-163-031-11	CERAMIC CHIP	10000PF		50V
C6	1-163-038-91	CERAMIC CHIP	100000PF		25V
C7	1-101-004-00	CERAMIC	0.01uF		50V
C8	1-163-031-11	CERAMIC CHIP	10000PF		50V
C9	1-163-031-11	CERAMIC CHIP	10000PF		50V
C10	1-163-031-11	CERAMIC CHIP	10000PF		50V
C11	1-163-038-91	CERAMIC CHIP	100000PF		25V
C14	1-163-038-91	CERAMIC CHIP	100000PF		25V
C15	1-136-162-00	METALIZED FILM	0.056uF	5%	50V
C16	1-163-038-91	CERAMIC CHIP	100000PF		25V
C17	1-163-031-11	CERAMIC CHIP	10000PF		50V
C18	1-163-088-00	CERAMIC CHIP	5PF		50V
C21	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C22	1-163-031-11	CERAMIC CHIP	10000PF		50V

Ref. No.	Part No.	Description			Remark
C23	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C24	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C26	1-126-967-11	ELECT	47uF	20%	50V
C28	1-126-967-11	ELECT	47uF	20%	50V
C29	1-162-306-11	CERAMIC	10000PF	20%	16V
C30	1-124-925-11	ELECT	2.2uF	20%	100V
C31	1-163-031-11	CERAMIC CHIP	10000PF		50V
C32	1-163-038-91	CERAMIC CHIP	100000PF		25V
C33	1-163-038-91	CERAMIC CHIP	100000PF		25V
C34	1-163-091-00	CERAMIC CHIP	8PF		50V
C35	1-163-038-91	CERAMIC CHIP	100000PF		25V
C36	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C37	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C38	1-162-211-31	CERAMIC	33PF	5%	50V
C39	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C40	1-163-031-11	CERAMIC CHIP	10000PF		50V
C41	1-163-031-11	CERAMIC CHIP	10000PF		50V
C42	1-163-038-91	CERAMIC CHIP	100000PF		25V
C43	1-163-038-91	CERAMIC CHIP	100000PF		25V
C44	1-163-031-11	CERAMIC CHIP	10000PF		50V
C45	1-163-038-91	CERAMIC CHIP	100000PF		25V
C46	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C47	1-126-967-11	ELECT	47uF	20%	50V
C48	1-163-031-11	CERAMIC CHIP	10000PF		50V
C49	1-124-902-00	ELECT	0.47uF	20%	50V
C50	1-124-903-11	ELECT	1.0uF	20%	50V
C51	1-124-903-11	ELECT	1.0uF	20%	50V
C52	1-126-964-11	ELECT	10uF	20%	50V
C53	1-126-964-11	ELECT	10uF	20%	50V
C54	1-126-157-11	ELECT	10uF	20%	16V
C55	1-126-157-11	ELECT	10uF	20%	16V
C56	1-126-157-11	ELECT	10uF	20%	16V
C57	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C58	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C59	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C60	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C61	1-126-301-11	ELECT	1uF	20%	50V
C62	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C63	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C64	1-126-967-11	ELECT	47uF	20%	50V
C65	1-163-031-11	CERAMIC CHIP	10000PF		50V
C66	1-126-162-11	ELECT	3.3uF	20%	50V
C67	1-126-933-11	ELECT	100uF	20%	10V
C68	1-162-306-11	CERAMIC	10000PF	20%	16V
C71	1-162-306-11	CERAMIC	10000PF	20%	16V
C72	1-126-967-11	ELECT	47uF	20%	50V

< FILTER >

CF1	1-567-389-11	FILTER, CERAMIC
CF3	1-567-389-11	FILTER, CERAMIC

TCB

Ref. No.	Part No.	Description	Remark
		< CONNECTOR >	
* CN1	1-568-834-11	SOCKET, CONNECTOR 15P	
		< VARIABLE CAPACITOR >	
CV1	1-141-227-00	CAP, TRIMMER 20PF	
CV2	1-141-227-00	CAP, TRIMMER 20PF	
		< DIODE >	
D1	8-719-976-30	DIODE KV1560NT	
D21	8-719-976-99	DIODE DTZ5.1B	
D41	8-719-016-74	DIODE 1SS352	
		< FRONT END >	
FE1	1-233-532-11	ENCAPSULATED COMPONENT	
FE2	1-239-262-11	ENCAPSULATED COMPONENT	
		< IC >	
IC21	8-759-288-54	IC LC72130	
IC41	8-759-176-03	IC LA1835	
		< IFT >	
IFT41	1-409-636-11	TRANSFORMER, IF (CERAMIC FILTER)	
		< JUMPER RESISTOR >	
JR45	1-216-295-91	METAL GLAZE 0 5%	1/10W
JR46	1-216-296-91	METAL GLAZE 0 5%	1/8W
JR47	1-216-295-91	METAL GLAZE 0 5%	1/10W
JR48	1-216-295-91	METAL GLAZE 0 5%	1/10W
JR49	1-216-296-91	METAL GLAZE 0 5%	1/8W
JR50	1-216-295-91	METAL GLAZE 0 5%	1/10W
JR51	1-216-295-91	METAL GLAZE 0 5%	1/10W
JR52	1-216-295-91	METAL GLAZE 0 5%	1/10W
JR53	1-216-296-91	METAL GLAZE 0 5%	1/8W
JR54	1-216-295-91	METAL GLAZE 0 5%	1/10W
		< COIL >	
L1	1-410-521-11	MICRO INDUCTOR 100uH	
L3	1-410-521-11	MICRO INDUCTOR 100uH	
L41	1-410-119-11	MICRO INDUCTOR (EL TYPE) 1mH	
		< FILTER >	
LPF41	1-239-845-11	FILTER, LOW PASS	
LPF42	1-239-845-11	FILTER, LOW PASS	
		< TRANSISTOR >	
Q1	8-729-201-27	TRANSISTOR 2SC2715Y-TE85L	
Q2	8-729-201-27	TRANSISTOR 2SC2715Y-TE85L	
Q3	8-729-201-27	TRANSISTOR 2SC2715Y-TE85L	
Q4	8-729-201-27	TRANSISTOR 2SC2715Y-TE85L	

Ref. No.	Part No.	Description	Remark
Q5	8-729-424-08	TRANSISTOR UN2111	
Q8	8-729-033-67	TRANSISTOR 2SK211-Y-TE85L	
Q9	8-729-216-22	TRANSISTOR 2SA812-T1-M5M6	
Q10	8-729-216-22	TRANSISTOR 2SA812-T1-M5M6	
Q12	8-729-421-22	TRANSISTOR UN2211	
Q13	8-729-421-22	TRANSISTOR UN2211	
Q14	8-729-421-22	TRANSISTOR UN2211	
		< RESISTOR >	
R1	1-249-401-11	CARBON 47 5%	1/4W
R2	1-216-037-00	METAL CHIP 330 5%	1/10W
R3	1-216-037-00	METAL CHIP 330 5%	1/10W
R5	1-216-037-00	METAL CHIP 330 5%	1/10W
R6	1-216-081-00	METAL CHIP 22K 5%	1/10W
R7	1-216-037-00	METAL CHIP 330 5%	1/10W
R8	1-216-037-00	METAL CHIP 330 5%	1/10W
R9	1-216-081-00	METAL CHIP 22K 5%	1/10W
R10	1-216-037-00	METAL CHIP 330 5%	1/10W
R11	1-216-081-00	METAL CHIP 22K 5%	1/10W
R12	1-216-037-00	METAL CHIP 330 5%	1/10W
R13	1-216-037-00	METAL CHIP 330 5%	1/10W
R14	1-216-081-00	METAL CHIP 22K 5%	1/10W
R18	1-216-065-00	METAL CHIP 4.7K 5%	1/10W
R19	1-216-073-00	METAL CHIP 10K 5%	1/10W
R20	1-216-121-91	METAL CHIP 1.0M 5%	1/10W
R21	1-216-049-91	METAL CHIP 1.0K 5%	1/10W
R22	1-216-049-91	METAL CHIP 1.0K 5%	1/10W
R23	1-216-049-91	METAL CHIP 1.0K 5%	1/10W
R24	1-216-025-91	METAL CHIP 100 5%	1/10W
R25	1-249-417-11	CARBON 1K 5%	1/4W
R26	1-249-437-11	CARBON 47K 5%	1/4W
R27	1-249-429-11	CARBON 10K 5%	1/4W
R28	1-249-417-11	CARBON 1K 5%	1/4W
R29	1-216-061-00	METAL CHIP 3.3K 5%	1/10W
R30	1-216-186-00	METAL CHIP 330 5%	1/8W
R31	1-216-025-91	METAL CHIP 100 5%	1/10W
R32	1-249-425-11	CARBON 4.7K 5%	1/4W
R33	1-249-425-11	CARBON 4.7K 5%	1/4W
R34	1-216-065-00	METAL CHIP 4.7K 5%	1/10W
R35	1-216-214-00	METAL CHIP 4.7K 5%	1/8W
R36	1-216-025-91	METAL CHIP 100 5%	1/10W
R37	1-216-073-00	METAL CHIP 10K 5%	1/10W
R38	1-216-089-91	METAL CHIP 47K 5%	1/10W
R39	1-249-429-11	CARBON 10K 5%	1/4W
R42	1-216-073-00	METAL CHIP 10K 5%	1/10W
R43	1-216-042-00	METAL CHIP 510 5%	1/10W
R44	1-216-013-00	METAL CHIP 33 5%	1/10W
R45	1-249-423-11	CARBON 3.3K 5%	1/4W
R46	1-216-073-00	METAL CHIP 10K 5%	1/10W

Ref. No.	Part No.	Description				Remark
R47	1-216-097-91	METAL CHIP	100K	5%	1/10W	
R48	1-249-423-11	CARBON	3.3K	5%	1/4W	
R49	1-216-061-00	METAL CHIP	3.3K	5%	1/4W	
R50	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R51	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R53	1-249-429-11	CARBON	10K	5%	1/4W	
R54	1-249-399-11	CARBON	33	5%	1/4W	
R55	1-216-162-00	METAL CHIP	33	5%	1/10W	
R56	1-249-393-11	CARBON	10	5%	1/4W	
R91	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R92	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R93	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R94	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R99	1-249-399-11	CARBON	33	5%	1/4W	F
		< VARIABLE RESISTOR >				
RV41	1-238-601-11	RES, ADJ, CARBON 22K				
RV42	1-238-600-11	RES, ADJ, CARBON 10K				
		< TRANSFORMER >				
T1	1-409-505-11	COIL (ANT. SW3)				
T2	1-402-960-11	COIL (OSC SW3)				
		< TERMINAL >				
TM1	1-537-238-21	TERMINAL BOARD (ANTENNA)				
		< VIBRATOR >				
X21	1-760-549-11	VIBRATOR, CRYSTAL (4.5MHz)				
X41	1-760-220-11	FILTER, CERAMIC (10.7MHz)				
X42	1-527-981-00	FILTER, CERAMIC (450kHz)				
X43	1-577-075-11	OSCILLATOR, CERAMIC (19kHz)				

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*	1-659-624-11	TRANSFORMER BOARD *******************				
	1-533-217-31	HOLDER, FUSE				
		< CAPACITOR >				
C616	1-164-159-21	CERAMIC	0.1uF		50V	
C1601	1-130-781-00	FILM	0.22uF	10%	100V	
C1602	1-130-781-00	FILM	0.22uF	10%	100V	
C1603	1-136-169-00	FILM	0.22uF	5%	50V	
C1604	1-136-169-00	FILM	0.22uF	5%	50V	
		< CONNECTOR >				
* CN1601	1-564-527-11	PLUG, CONNECTOR 12P				
CN1602	1-564-321-00	PIN, CONNECTOR 2P				

Ref. No.	Part No.	Description				Remark
		< DIODE >				
D1601	8-719-510-68	DIODE D5SBA20F01				
D1602	8-719-025-03	DIODE RBA-402-SL (TH)				
D1602	8-719-028-23	DIODE D3SBA20-4101 (EXCEPT TH)				
		< FUSE >				
⚠F1602	1-532-465-31	FUSE, TIME-LAG (3.15A 250V) (E, EA, SP, HK, IA, AR, PX)				
⚠F1603	1-532-506-31	FUSE, TIME-LAG (6.3A 250V) (EXCEPT US, CND)				
⚠F1603	1-533-310-11	FUSE, GLASS CYLINDRICAL (DIA.5) (6.3A 125V) (US, CND)				
⚠F1604	1-532-506-31	FUSE, TIME-LAG (6.3A 250V) (EXCEPT US, CND)				
⚠F1604	1-533-310-11	FUSE, GLASS CYLINDRICAL (DIA.5) (6.3A 125V) (US, CND)				
⚠F1605	1-532-465-31	FUSE, TIME-LAG (3.15A 250V) (EXCEPT US, CND)				
⚠F1605	1-533-419-11	FUSE, GLASS CYLINDRICAL (DIA.5) (4A 125V) (US, CND)				
⚠F1606	1-532-465-31	FUSE, TIME-LAG (3.15A 250V) (EXCEPT US, CND)				
⚠F1606	1-533-419-11	FUSE, GLASS CYLINDRICAL (DIA.5) (4A 125V) (US, CND)				
		< RESISTOR >				
⚠R1601	1-202-725-00	SOLID	3.3M	10%	1/2W (US, CND)	
⚠R1602	1-219-124-11	FUSIBLE	0.68	10%	1/4W (US, CND)	F
⚠R1603	1-219-120-11	FUSIBLE	0.15	5%	1/4W	F
⚠R1604	1-219-120-11	FUSIBLE	0.15	5%	1/4W	F
⚠R1605	1-217-637-00	FUSIBLE	1	5%	1/4W	F
		< SWITCH >				
⚠S1601	1-572-675-11	SWITCH, POWER VOLTAGE CHANGE (VOLTAGE SELECTOR) (E, EA, SP, HK, IA, AR, PX)				
		< TRANSFORMER >				
⚠T1601	1-429-298-11	TRANSFORMER, POWER (AR)				
⚠T1601	1-429-530-11	TRANSFORMER, POWER (AEP, UK, G, IT)				
⚠T1601	1-429-531-11	TRANSFORMER, POWER (E, AUS, SP, HK, IA, PX)				
⚠T1601	1-429-531-21	TRANSFORMER, POWER (EA, MY, TH)				
⚠T1601	1-429-532-11	TRANSFORMER, POWER (US, CND)				

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		MISCELLANEOUS **************				
3	1-751-086-11	WIRE (FLAT TYPE) (13 CORE) (US, CND, E2, AUS, AR, TH)				
3	1-773-012-11	WIRE (FLAT TYPE) (15 CORE) (AEP, UK, E3, PX, G, IT, EA, MY, SP, HK, IA)				
5	1-773-157-11	WIRE (FLAT TYPE) (21 CORE)				
6	1-769-977-11	WIRE (FLAT TYPE) (13 CORE)				
8	1-765-325-11	WIRE (FLAT TYPE) (11 CORE)				

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
9	1-776-442-11	WIRE (FLAT TYPE) (19 CORE)	
⚠58	1-569-007-11	ADAPTER, CONVERSION 2P (E3, PX, IA)	
⚠58	1-569-008-11	ADAPTER, CONVERSION 2P (EA, SP)	
⚠58	1-770-019-11	ADAPTOR, CONVERSION PLUG 3P (HK)	
257	1-452-538-11	MAGNET	
258	1-776-042-11	WIRE (FLAT TYPE) (8 CORE)	
⚠301	8-848-367-11	OPTICAL PICK UP KSS-213BA/F-NP	
302	1-769-069-11	WIRE (FLAT TYPE) (16 CORE)	
⚠CNP1601	1-575-651-11	CORD, POWER (AEP, G, IT, EA, MY, SP, HK, AR)	
⚠CNP1601	1-575-653-11	CORD, POWER (E, IA, PX)	
⚠CNP1601	1-690-608-11	CORD, POWER (AUS)	
⚠CNP1601	1-690-609-21	CORD, POWER (US, CND)	
⚠CNP1601	1-751-326-31	CORD, POWER (TH)	
⚠CNP1601	1-751-520-21	CORD, POWER (UK)	
⚠F1602	1-532-465-31	FUSE, TIME-LAG (3.15A 250V)	(E, EA, SP, HK, IA, AR, PX)
⚠F1603	1-532-506-31	FUSE, TIME-LAG (6.3A 250V)	(EXCEPT US, CND)
⚠F1603	1-533-310-11	FUSE, GLASS CYLINDRICAL (DIA.5)	(6.3A 125V) (US, CND)
⚠F1604	1-532-506-31	FUSE, TIME-LAG (6.3A 250V) (EXCEPT US, CND)	
⚠F1604	1-533-310-11	FUSE, GLASS CYLINDRICAL (DIA.5)	(6.3A 125V) (US, CND)
⚠F1605	1-532-465-31	FUSE, TIME-LAG (3.15A 250V) (EXCEPT US, CND)	
⚠F1605	1-533-419-11	FUSE, GLASS CYLINDRICAL (DIA.5) (4A 125V)	(US, CND)
⚠F1606	1-532-465-31	FUSE, TIME-LAG (3.15A 250V) (EXCEPT US, CND)	
⚠F1606	1-533-419-11	FUSE, GLASS CYLINDRICAL (DIA.5) (4A 125V)	(US, CND)
FL501	1-517-483-11	INDICATOR TUBE, FLUORESCENT	
HP101	1-500-093-11	HEAD, MAGNETIC (PLAYBACK)	
HRPE101	1-500-094-11	HEAD, MAGNETIC (REC/PB/ERASE)	
M1	X-3371-223-1	MOTOR ASSY (CAPSTAN)	
M2	A-2004-410-A	MOTOR ASSY (TRIGGER)	
M101	X-4917-523-4	MOTOR ASSY (SPINDLE)	
M102	X-4917-504-1	MOTOR ASSY (SLED)	
M701	A-4672-004-A	MOTOR ASSY (TURN)	
M801	A-4672-004-A	MOTOR ASSY (SLED)	
M901	1-698-659-11	FAN, DC	
S101	1-572-085-11	SWITCH, LEAF (LIMIT)	
S811	1-473-335-11	ENCODER, ROTARY (BU, TRAY ADDRESS DET)	
⚠T1601	1-429-530-11	TRANSFORMER, POWER (AEP, UK, G, IT)	
⚠T1601	1-429-531-11	TRANSFORMER, POWER	(E, AUS, SP, HK, IA, AR PX)
⚠T1601	1-429-531-21	TRANSFORMER, POWER (EA, MY, TH)	
⚠T1601	1-429-532-11	TRANSFORMER, POWER (US, CND)	

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ACCESSORIES & PACKING MATERIALS
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Ref. No.	Part No.	Description	Remark
*	4-980-428-01	CUSHION (FRONT) (Malaysia product)	
*	4-980-429-01	CUSHION (REAR) (Malaysia product)	
*	4-982-547-01	CUSHION (FRONT) (Except Malaysia product)	
*	4-982-548-01	CUSHION (REAR) (Except Malaysia product)	

****

****
HARDWARE LIST
****

Ref. No.	Part No.	Description	Remark
#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
#2	7-685-871-01	SCREW +BVTT 3X6 (S)	
#3	7-685-650-79	SCREW +BVTP 3X16 TYPE2 N-S	
#4	7-621-775-10	SCREW +B 2.6X4	
#5	7-621-255-15	SCREW +P 2X3	
#6	7-685-131-19	SCREW +BTP 2.6X4 TYPE2 N-S	
#7	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S	
#8	7-623-921-01	RING, RETAINING, CAPSTAN	
#9	7-621-775-00	SCREW +B 2.6X3	
#10	7-685-533-19	SCREW +BTP 2.6X6 TYPE2 N-S	
#11	7-621-770-67	SCREW +BVTT 2.6X6 (S)	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

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Quality Engineering Dept.

Sony Corporation
Consumer A&V Products Company
Home A&V Products Div.

9-960-537-11

SS-H991

SERVICE MANUAL

US Model
Canadian Model
AEP Model
UK Model
E Model
Australian Model
Tourist Model

This set is the speaker system in MHC-881, MHC-991AV, MHC-D7, MHC-G88 and MHC-G99AV.

SPECIFICATIONS

Speaker system	3-way system, magnetically shielded type
Speaker units	Woofer : 17cm dia., cone type Tweeter : 5cm dia., cone type Super tweeter : 2cm dia., dome type
Enclosure	Bass reflex
Nominal impedance	8 ohms
Dimensions	Approx. 220×325×275 mm (w/h/d) (8 3/4×12 7/8×10 7/8 in.)
Mass	Approx. 5kg (11lb) net per speaker

Design and specification subject to change without notice.

MICROFILM

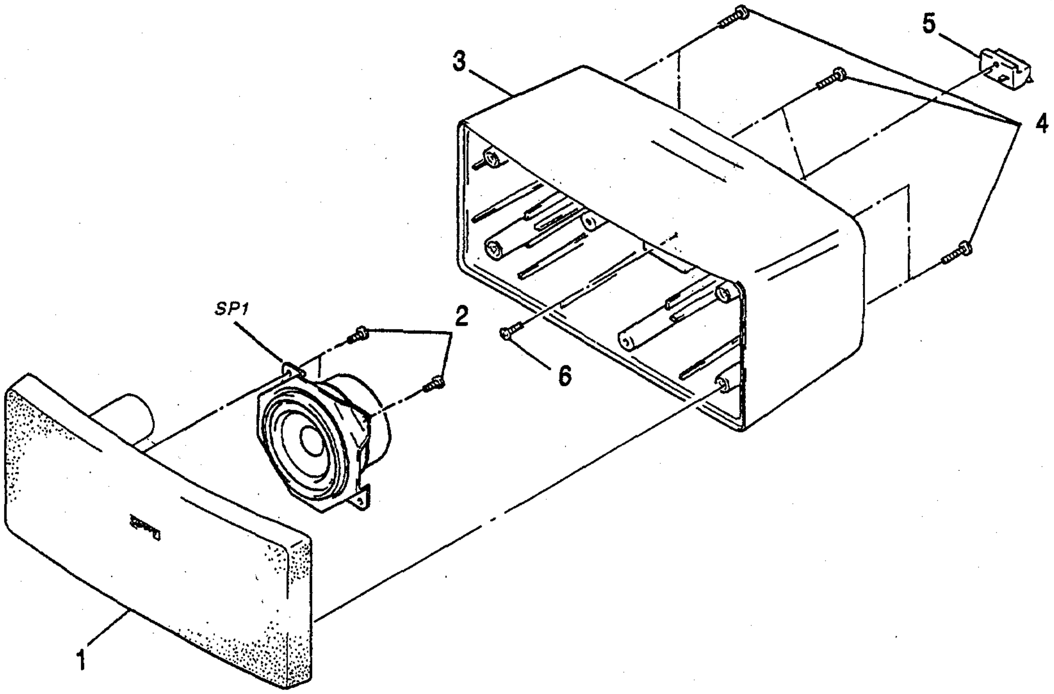
SPEAKER SYSTEM

SONY®

EXPLODED VIEW AND PARTS LIST

NOTE :

- Items marked " * "are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.



Ref. No.	Part No.	Description	Remark
1	X-4947-190-1	FRAME ASSY, FRONT	
2	7-685-660-11	SCREW +BVTP 4×10 TYPE 2	
3	4-982-147-01	CABINET	
4	7-685-663-79	SCREW +BVTP 4×16 TYPE 2	
5	1-537-775-11	TERMINAL BOARD	
6	7-685-661-79	SCREW +BVTP 4×12 TYPE 2	
SP1	1-505-312-11	SPEAKER (8cm)	

****

ACCESSORIES & PACKING MATERIALS

****

	1-769-433-21	CORD, SPEAKER
	4-972-322-01	FOOT (Y)
*	4-982-299-01	CUSHION (UPPER)
*	4-982-300-01	CUSHION (LOWER)

Sony Corporation
Consumer A&V Products Company
Home A&V Products Div.

English
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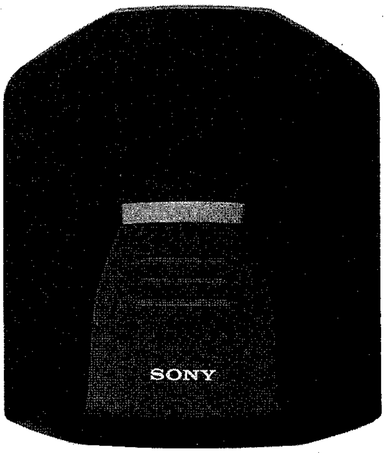
Quality Engineering Dept.

SS-SR991

SERVICE MANUAL

US Model
AEP Model
UK Model
E Model
Australian Model
Tourist Model



SPECIFICATIONS

Speaker system	Full range speaker system Magnetically shielded type
Speaker unit	10cm, cone type
Enclosure type	Bass reflex
Rated impedance	16 ohms
Dimensions	Approx. 200×90×235 mm ($7\,^7/_8 \times 3\,^{17}/_{32} \times 9\,^1/_4$ in.) (w/h/d) incl. front grille
Mass	Approx. 1 kg (35.3 oz) per speaker

Design and specifications are subject to change without notice.

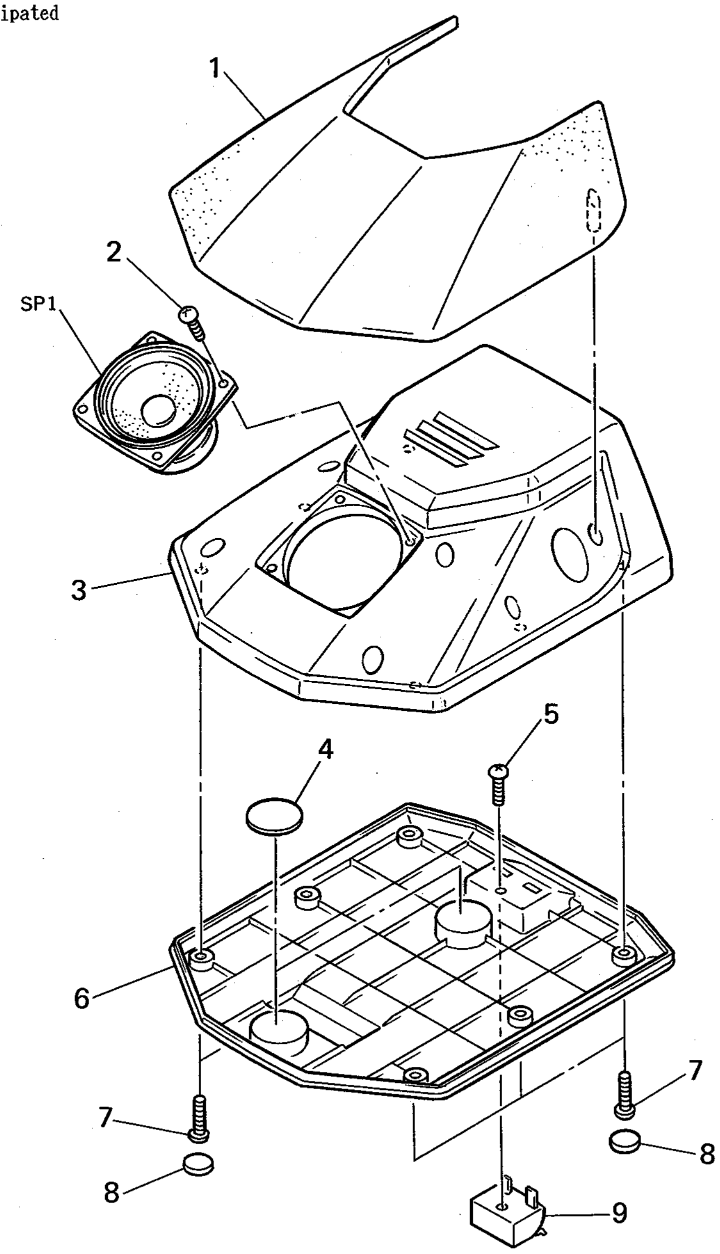
MICROFILM

SPEAKER SYSTEM

SONY®

EXPLODED VIEW

NOTE:
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.



Ref. No.	Part No.	Description	Remark
1	X-4947-168-1	GRILLE ASSY, FRONT	
2	7-685-660-29	SCREW +BVTP 4X10 TYPE2 SLIT	
* 3	4-981-588-01	CABINET (UPPER)	
* 4	4-982-338-01	PLATE, COVER	
5	7-685-661-29	SCREW +BVTP 4X12 TYPE2 SLIT	
* 6	4-981-589-01	CABINET (LOWER)	
7	7-685-663-79	SCREW +BVTP 4X16 TYPE2 SLIT	
8	4-982-339-01	FOOT	
9	1-537-775-11	TERMINAL BOARD	
SP1	1-505-302-11	SPEAKER (8CM)	

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ACCESSORIES & PACKING MATERIALS

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Ref. No.	Part No.	Description	Remark
	1-769-433-11	CORD, SPEAKER	
*	4-980-957-01	CUSHION (UPPER)	

Sony Corporation
Consumer A & V Products Company
Home A & V Products Div.

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Quality Engineering Dept.

HCD-H991AV

SONY

SERVICE MANUAL

US Model
Canadian Model
AEP Model
UK Model
E Model
Australian Model
PX Model

SUPPLEMENT-1

File this supplement with the service manual.

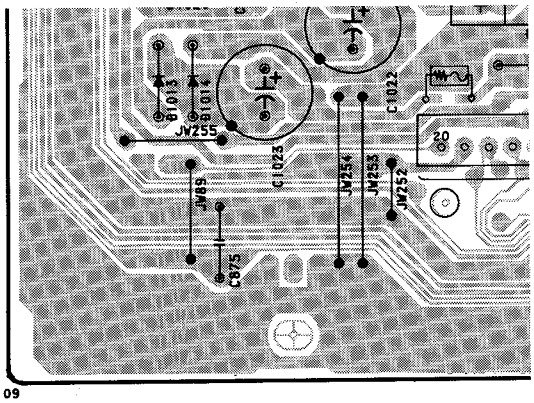
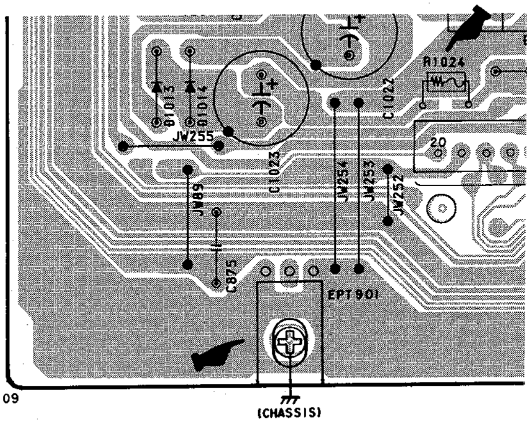
Subject : 1. CORRECTION
2. SERVICING NOTE ADDITION
3. PARTS AND BOARD CHANGED

(ECN-TA602396/ENG-96006)

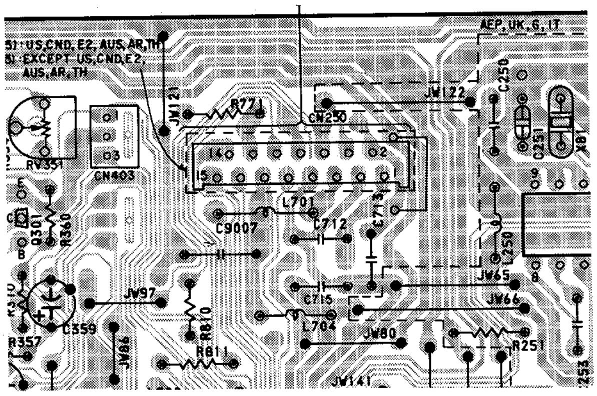
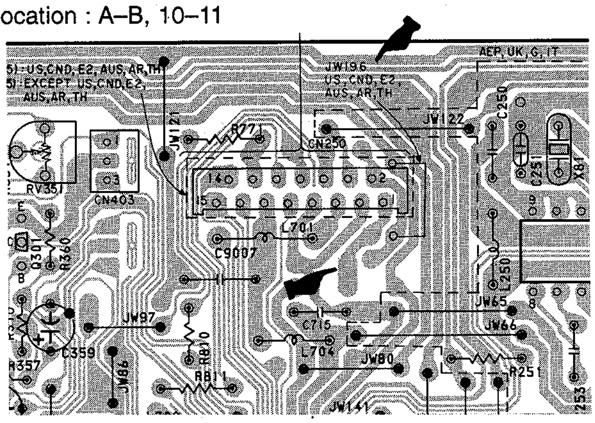
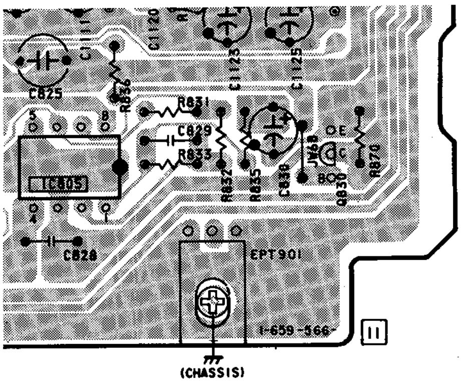
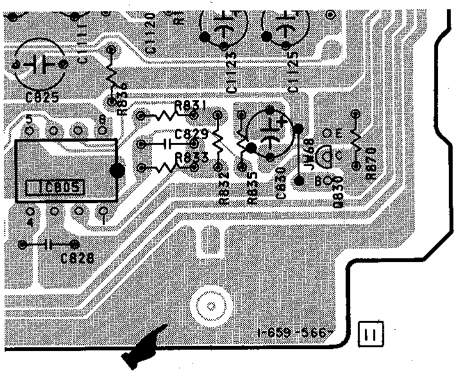
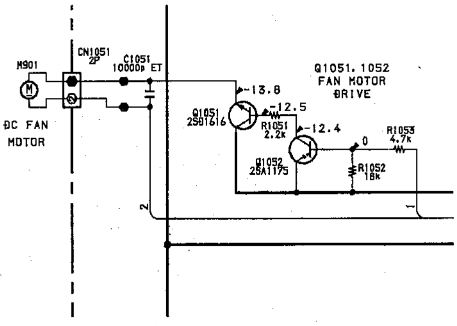
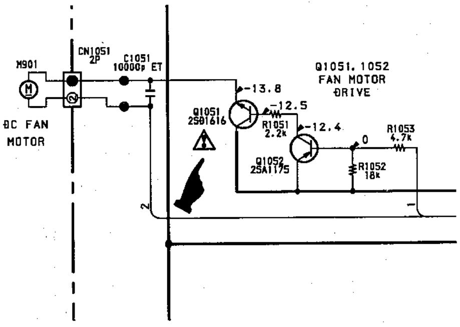
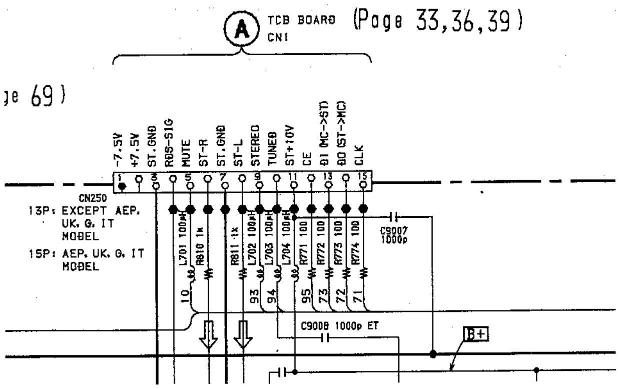
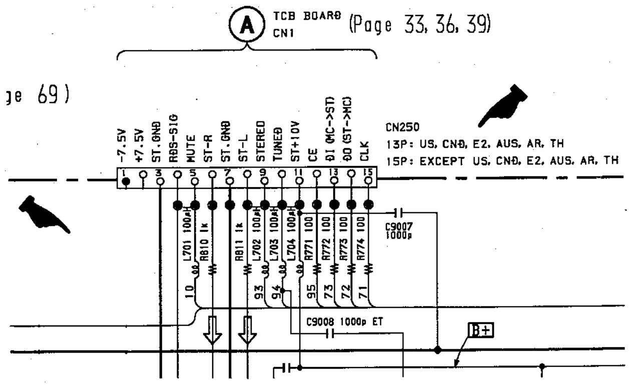
1. CORRECTION

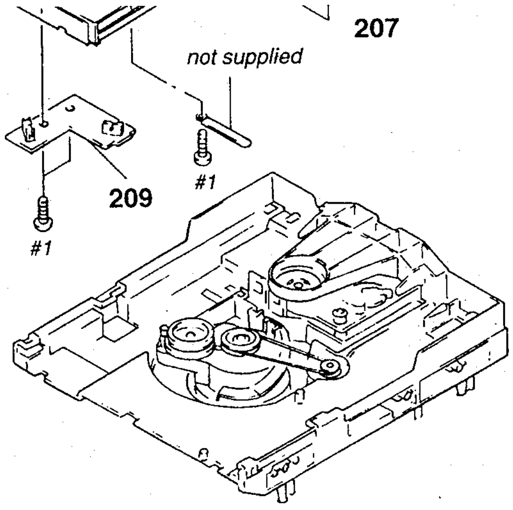
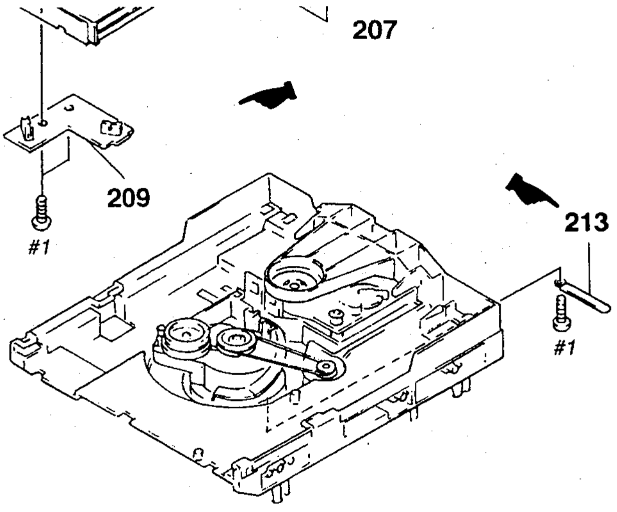
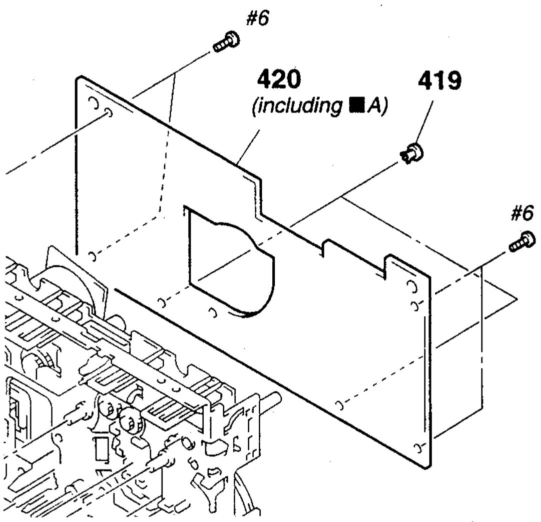
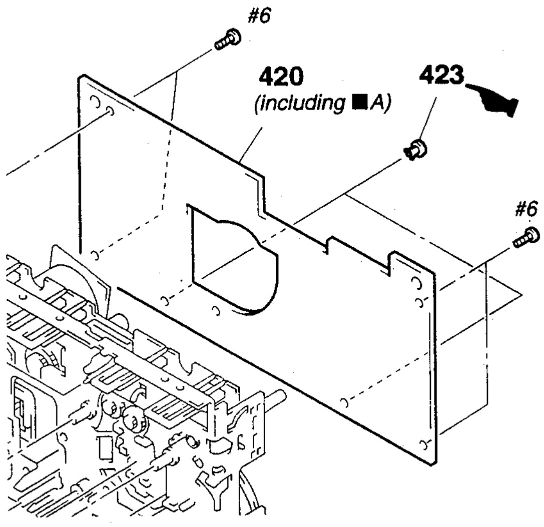
- Correct your service manual as shown below.

☛ : indicates corrected portion.

Page	INCORRECT	CORRECT
47	**[MAIN BOARD]** Location : L, 4–5  B1013 B1014 JW255 C1022 C1023 JW89 JW254 JW253 JW252 C875 20 09	**[MAIN BOARD]** Location : L, 4–5  R1024 B1013 B1014 JW255 C1022 C1023 JW89 JW254 JW253 JW252 C875 EPT901 20 09 (CHASSIS)

☛ : indicates corrected portion.

Page	INCORRECT	CORRECT
48	**[MAIN BOARD]** Location : A–B, 10–11  5) US,CND,E2,AUS,AR,TH 5) EXCEPT US,CND,E2,AUS,AR,TH AEP,UK,G,IT RV351 CN403 JW121 R771 CN250 JW122 C250 C251 X81 Q301 R360 C9007 L701 C712 C713 L250 C359 JW97 R810 C715 JW65 JW66 L704 JW80 R251 R357 JW86 R811 JW141 253	**[MAIN BOARD]** Location : A–B, 10–11  5) US,CND,E2,AUS,AR,TH 5) EXCEPT US,CND,E2,AUS,AR,TH JW196 US,CND,E2,AUS,AR,TH AEP,UK,G,IT RV351 CN403 JW121 R771 CN250 JW122 C250 C251 X81 Q301 R360 C9007 L701 L250 C359 JW97 R810 C715 JW65 JW66 L704 JW80 R251 R357 JW86 R811 JW141 253
	[MAIN BOARD] Location : L, 15–16  C1120 C1123 C1125 C825 R836 R831 C829 R833 IC805 R832 R835 C830 JW68 Q830 R870 C828 EPT901 1-659-566- 11 (CHASSIS)	**[MAIN BOARD]** Location : L, 15–16  C1120 C1123 C1125 C825 R836 R831 C829 R833 IC805 R832 R835 C830 JW68 Q830 R870 C828 1-659-566- 11
49	**[MAIN BOARD]** Location : Q–S, 2–4  M901 DC FAN MOTOR CN1051 2P C1051 10000p ET Q1051, 1052 FAN MOTOR DRIVE -13.8 -12.5 -12.4 0 Q1051 2SD1616 R1051 2.2k Q1052 2SA1175 R1052 18k R1053 4.7k 2 1	**[MAIN BOARD]** Location : Q–S, 2–4  M901 DC FAN MOTOR CN1051 2P C1051 10000p ET Q1051, 1052 FAN MOTOR DRIVE -13.8 -12.5 -12.4 0 Q1051 2SD1616 R1051 2.2k Q1052 2SA1175 R1052 18k R1053 4.7k 2 1
50	**[MAIN BOARD]** Location : A–C, 10–12  A TCB BOARD CN1 (Page 33,36,39) je 69) -7.5V +7.5V ST.GND RDS-SIG MUTE ST-R ST.GND ST-L STEREO TUNED ST+10V CE DI (MC->ST) DO (ST->MC) CLK CN250 13P: EXCEPT AEP, UK, G, IT MODEL 15P: AEP, UK, G, IT MODEL L701 100μH R810 1k R811 1k L702 100μH L703 100μH L704 100μH R771 100 R772 100 R773 100 R774 100 C9007 1000p C9008 1000p ET B+	**[MAIN BOARD]** Location : A–C, 10–12  A TCB BOARD CN1 (Page 33, 36, 39) je 69) -7.5V +7.5V ST.GND RDS-SIG MUTE ST-R ST.GND ST-L STEREO TUNED ST+10V CE DI (MC->ST) DO (ST->MC) CLK CN250 13P: US, CND, E2, AUS, AR, TH 15P: EXCEPT US, CND, E2, AUS, AR, TH L701 100μH R810 1k R811 1k L702 100μH L703 100μH L704 100μH R771 100 R772 100 R773 100 R774 100 C9007 1000p C9008 1000p ET B+

Page	INCORRECT				CORRECT			
92	Ref No.	Part No.	Description	Remark	Ref No.	Part No.	Description	Remark
			*** EXPLODED VIEWS ***				*** EXPLODED VIEWS ***	
					213	3-703-150-11	CLAMP	
			 207 not supplied #1 209 #1				 207 209 #1 213 #1	
96					423	3-911-116-11	RIVET, PUSH	
			 #6 420 (including ■A) 419 #6				 #6 420 (including ■A) 423 #6	
97	469	3-914-111-01	SPRING (FR), TORSION		469	3-911-114-01	SPRING (FR), TORSION	

- Abbreviation
  - CND : Canadian model
  - AUS : Australian model
  - AR : Argentine model
  - TH : Thailand model
  - E2 : Without SW tuner model

☛ : indicates corrected portion.

ELECTRICAL PARTS LIST

Page	INCORRECT Ref No.	Part No.	Description	Remark	CORRECT Ref No.	Part No.	Description	Remark
105			*** MAIN BOARD ***				*** MAIN BOARD ***	
	Q1051	8-729-111-29	TRANSISTOR 2SD1616A-K		☛ ⚠Q1051	8-729-111-29	TRANSISTOR 2SD1616A-K	
108			*** MD BOARD ***				☛ *** MD BOARD ***	
	C304	1-107-715-11	ELECT 22uF 20% 16V					
118			*** TCB BOARD *** (US, CND, E2, AR, AUS, TH)				*** TCB BOARD *** ☛ (US, CND, E2, AR, AUS, TH)	
	R99	1-249-399-11	CARBON 33K 5% 1/4W	F	R99	1-249-399-11	CARBON 33 5% 1/4W	F

- Abbreviation

  CND : Canadian model
  AUS : Australian model
  AR : Argentine model
  TH : Thailand model
  E2 : Without SW tuner model

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

ELECTRICAL ADJUSTMENTS CORRECTION

• Correct your service manual as shown below.

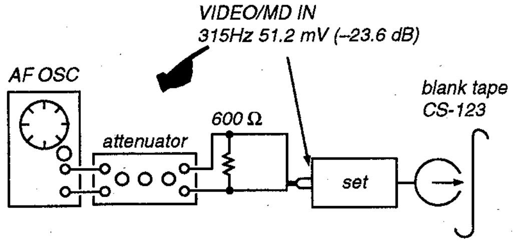
☛ : indicates corrected portion

DECK SECTION

Record Level Adjustment (Deck B) — page 13 —

Procedure:

1. Press FUNCTION button to select VIDEO.
2. Mode: record



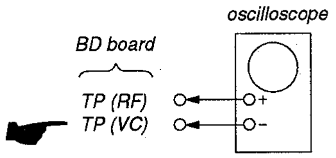
CD SECTION

— page 16 —

Note:

1. CD Block is basically designed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use an oscilloscope with more than 10MΩ impedance.
4. Clean the object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.
5. Adjust the focus bias adjustment when optical block is replaced.

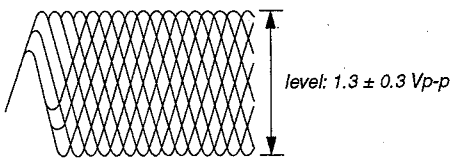
Focus Bias Adjustment



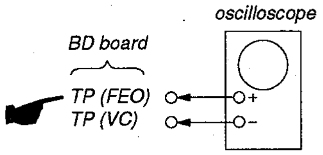
Procedure:

1. Connect oscilloscope to test point TP (RF). ☛
2. Turned Power switch on.
3. Put disc (YEDS-18) in and playback.
4. Adjust RV101 so that the waveform is clear.
   (Clear RF signal waveform means that the shape "◊" can be clearly distinguished at the center of the waveform.)
5. After adjustment, check the RF signal level.

• RF signal
VOLT/DIV: 200 mV
TIME/DIV: 500 nS



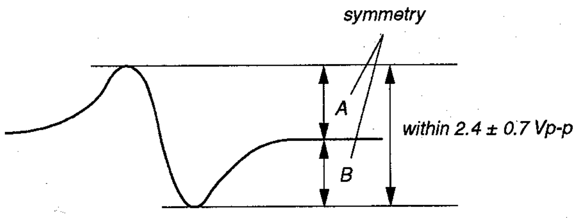
S Curve Check



Procedure :

1. Connect oscilloscope to test point TP (FEO).
2. Connect between test point TP (FOK) and Ground by lead wire.
3. Turn Power switch on.
4. Put disc (YEDS-18) in and turned Power switch on again and actuate the focus search. (actuate the focus search when disc table is moving in and out.)
5. Check the oscilloscope waveform (S-curve) is symmetrical between A and B. And confirm peak to peak level within 2.4 ± 0.7 Vp-p.

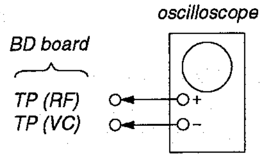
S-curve waveform



6. After check, remove the lead wire connected in step 2.

Note: • Try to measure several times to make sure than the ratio of A : B or B : A is more than 10 : 7.
• Take sweep time as long as possible and light up the brightness to obtain best waveform.

RF Level Check

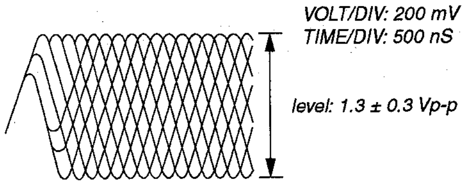


Procedure :

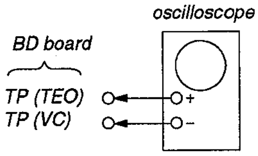
1. Connect oscilloscope to test point TP (RF) on BD board.
2. Turned Power switch on.
3. Put disc (YEDS-18) in and playback.
4. Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.

Note: Clear RF signal waveform means that the shape "◊" can be clearly distinguished at the center of the waveform.

RF signal waveform



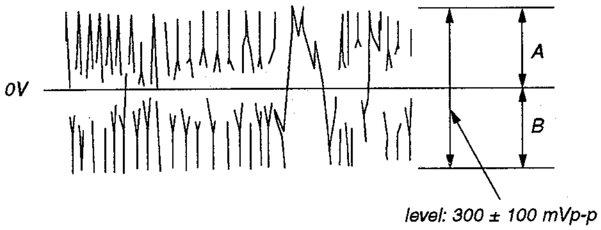
E-F Balance Check — page 17 —


oscilloscope
BD board
TP (TEO)
TP (VC)
+
-

Procedure:

1. Connect test point TP703 (ADJ2) on Main board to Ground with a lead wire.
2. Connect oscilloscpe to test point TP (TEO).
3. Turned Power switch on.
4. Put disc (YEDS-18) in and playback.
5. Confirm that the oscilloscope waveform is symmetrical on the top and bottom in relation to 0Vdc, and check this level.

Traverse waveform



Specified level: • $\frac{A-B}{2(A+B)}$ x 100 = less than ± 7%

• A + B = 300 ± 100 mVp-p

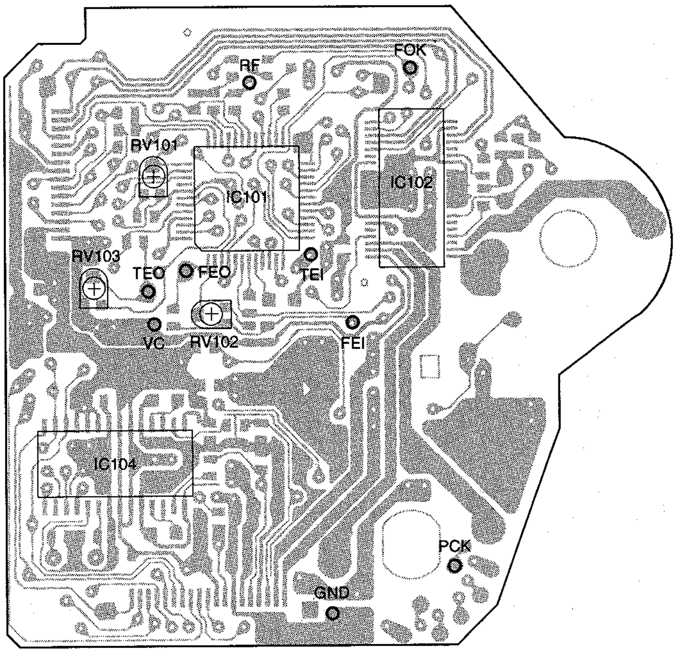
6. Remove the lead wire connected in step 1.

Focus/Tracking Gain Adjustment (RV102, RV103)

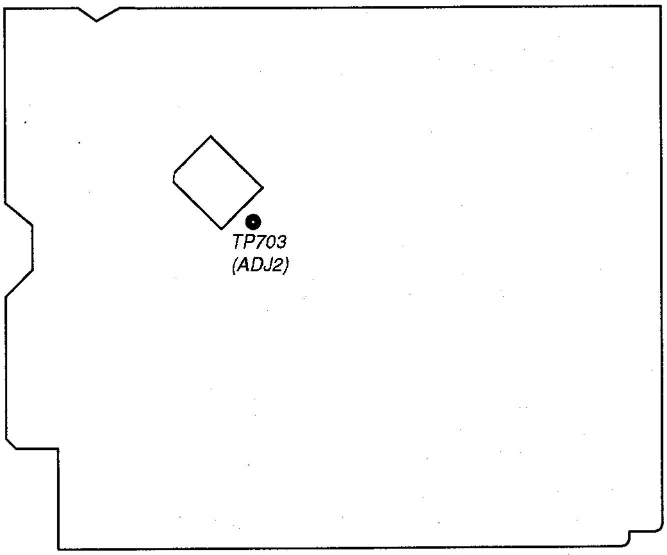
This gain has a margin, so even if it is slightly off.
There is no problem.
Therfore, do not perform this adjustment.
Please note that it should be fixed to mechanical center position when you moved and do not know original position.

Adjustment Location:

[BD BOARD] — Component Side —


RF
FOK
RV101
IC101
IC102
RV103
TEO
FEO
TEI
VC
RV102
FEI
IC104
PCK
GND

[MAIN BOARD] — Conductor Side —



2. SERVICING NOTE ADDITION

[How to reset all]

Pressing the TUNER/BAND , DISPLAY/DEMO and MENU3 buttons simultaneously, all are reset and returned to as when the unit was shipped.

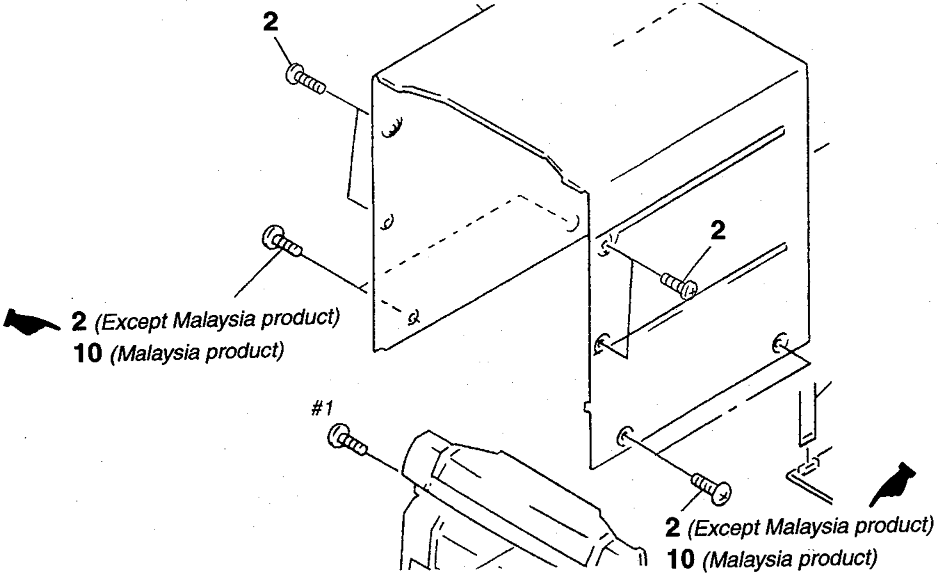
* NOTE
The TCB BOARD, COMPLETE was changed to FM/AM TUNER PACK in the middle of producing.

3. PARTS AND BOARD CHANGED

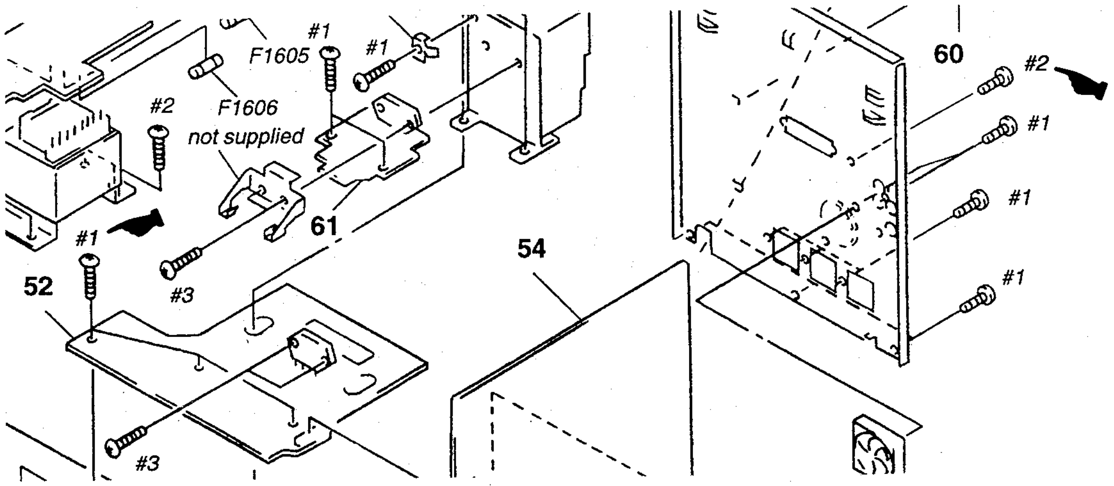
- Parts changed (Exploded views)

☛ : indicates changed portion

Page	FORMER				NEW			
	Ref No.	Part No.	Description	Remark	Ref No.	Part No.	Description	Remark
87			*** EXPLODED VIEWS ***				*** EXPLODED VIEWS ***	
	* 4	A-4303-506-A	TCB BOARD (E3, PX, SP, HK, IA)		* 4	1-233-546-11	ENCAPSLATED COMPONENT, FM/AM TUNER *NOTE (E3, PX, EA, MY, SP, HK, IA)	
	* 4	A-4303-518-A	TCB BOARD (EA, MY)			———		
	9	1-776-442-11	WIRE (FLAT TYPE) (19 CORE)		9	1-776-442-11	WIRE (FLAT TYPE) (19 CORE)	(Except US, AEP, E, PX, TH)
		———			9	1-776-241-11	WIRE (FLAT TYPE) (19 CORE)	(US, AEP, E, PX, TH)
		———			10	4-929-973-31	SCREW (CASE, 3 POINT) (Malaysia product)	



Page	FORMER				NEW			
89	⚠F1605	1-532-465-31	FUSE, TIME-LAG (3.15A 250V)	(Except US, CND)	⚠F1605	1-532-465-31	FUSE, TIME-LAG (3.15A 250V)	(AEP, UK, G, IT)
		———			⚠F1605	1-532-464-31	FUSE, TIME-LAG (2.5A 250V)	(Except US, CND, AEP, UK, G, IT)
	⚠F1606	1-532-465-31	FUSE, TIME-LAG (3.15A 250V)	(Except US, CND)	⚠F1606	1-532-465-31	FUSE, TIME-LAG (3.15A 250V)	(AEP, UK, G, IT)
		———			⚠F1606	1-532-464-31	FUSE, TIME-LAG (2.5A 250V)	(Except US, CND, AEP, UK, G, IT)



- Abbreviation

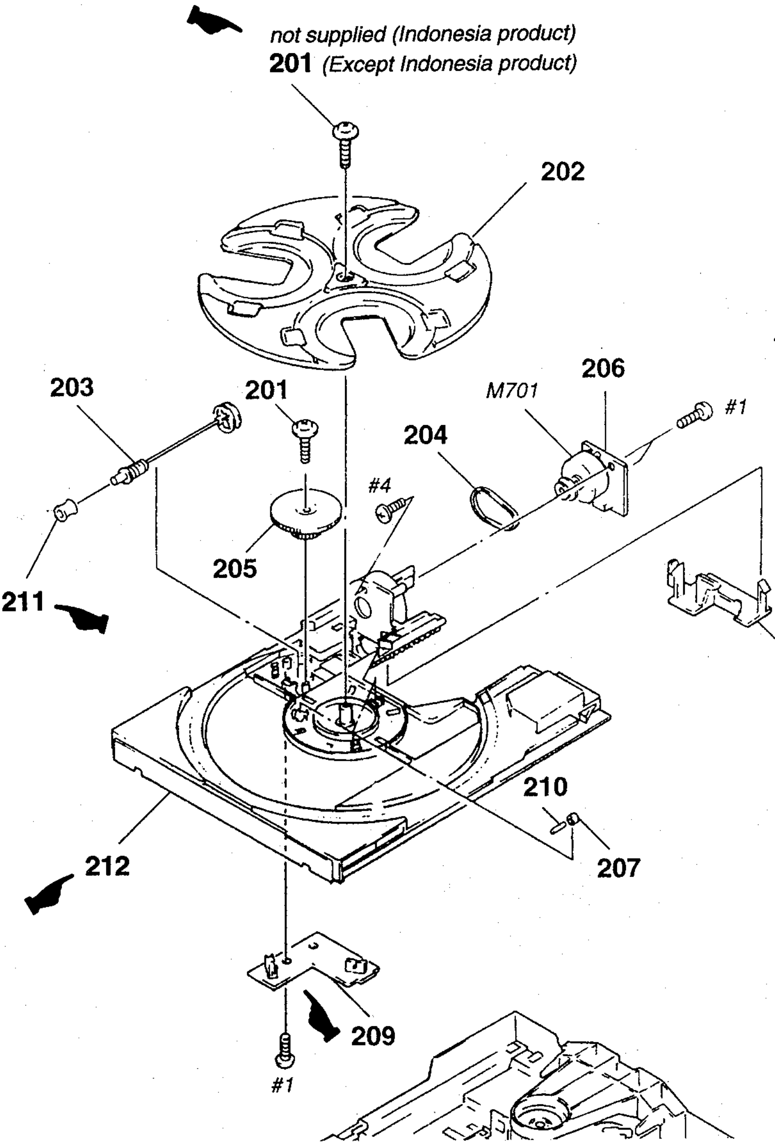
CND	: Canadian model	SP	: Singapore model
G	: German model	MY	: Malaysia model
IT	: Italian model	TH	: Thailand model
EA	: Saudi Arabia model	IA	: Indonesian model
HK	: Hong Kong model	E3	: With SW tuner model

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

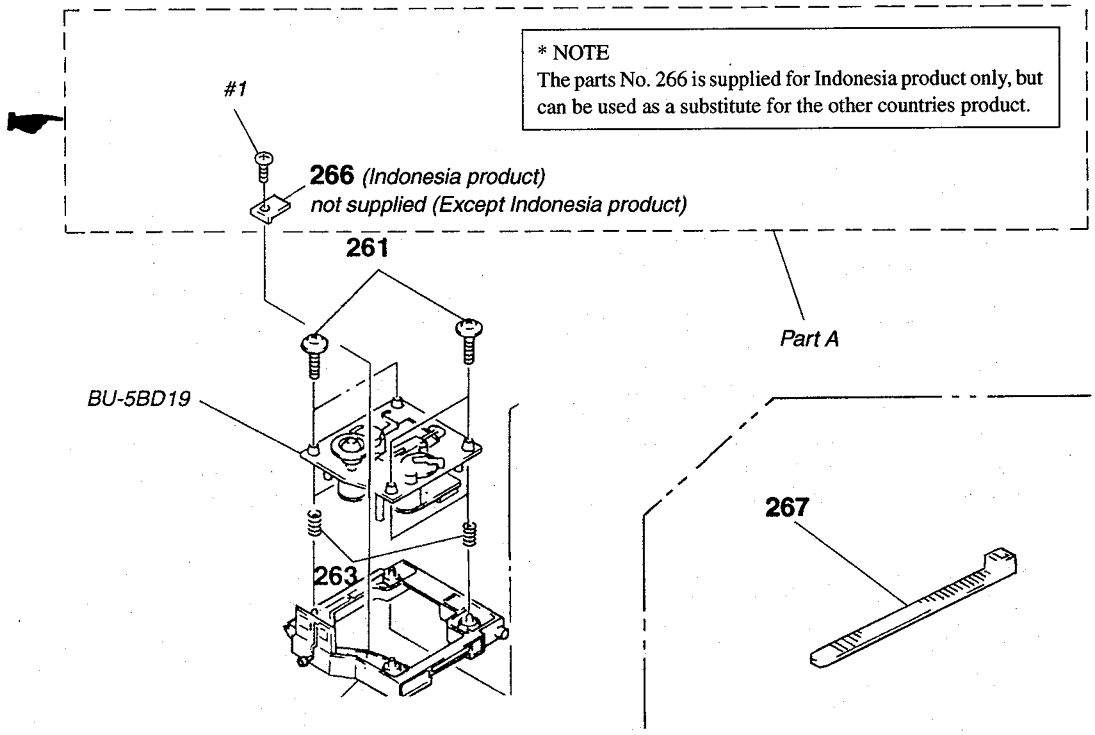
☛ : indicates changed portion

Page	FORMER				NEW			
	Ref No.	Part No.	Description	Remark	Ref No.	Part No.	Description	Remark
90	101	X-4946-661-1	LID (A) ASSY, CASSETTE	(Except Indonesia product)	101	X-4946-661-2	LID (A) ASSY, CASSETTE	(Except Indonesia product)
	102	X-4946-662-1	LID (B) ASSY, CASSETTE	(Except Indonesia product)	102	X-4946-662-2	LID (B) ASSY, CASSETTE	(Except Indonesia product)
	* 110	A-4389-538-A	PANEL BOARD, COMPLETE (AEP, UK, G, IT)		* 110	A-4389-538-A	PANEL BOARD, COMPLETE	(Indonesia product) (AEP, UK, G, IT)
					* 110	A-4389-025-A	PANEL BOARD, COMPLETE	(Malaysia product) (AEP)
92	201	4-917-583-71	BRACKET, YOKE (Indonesia product)					
					211	4-981-187-01	COLLAR (WORM)	
					212	4-977-944-01	TRAY (SLIDE)	


not supplied (Indonesia product)
201 (Except Indonesia product)
202
203
201
M701
206
#1
204
#4
205
211
208
210
212
207
209
#1

- Abbreviation
  G : German model
  IT : Italian model

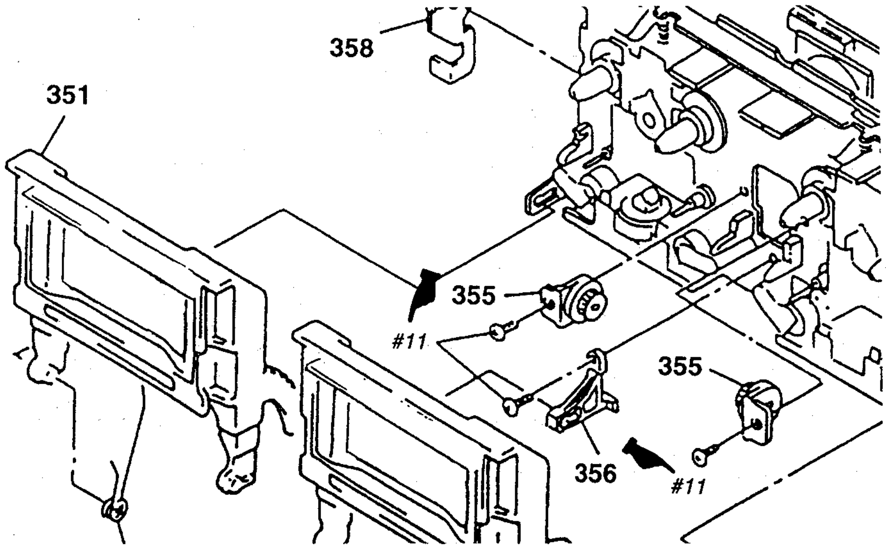
Page	FORMER				NEW			
	Ref No.	Part No.	Description	Remark	Ref No.	Part No.	Description	Remark
93	251	4-917-583-21	BRACKET, YOKE (Except Indonesia product)		251	4-917-583-21	BRACKET, YOKE (Thailand product)	
	251	4-917-583-71	BRACKET, YOKE (Indonesia product)		251	4-917-583-71	BRACKET, YOKE (Except Thailand product)	
					267	3-701-748-00	CLAMP	


#1
266 (Indonesia product)
not supplied (Except Indonesia product)
261
BU-5BD19
263
Part A
267

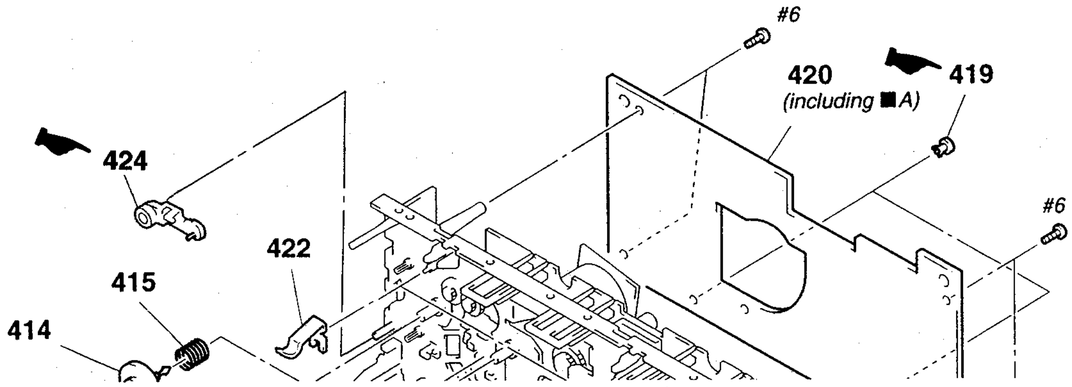
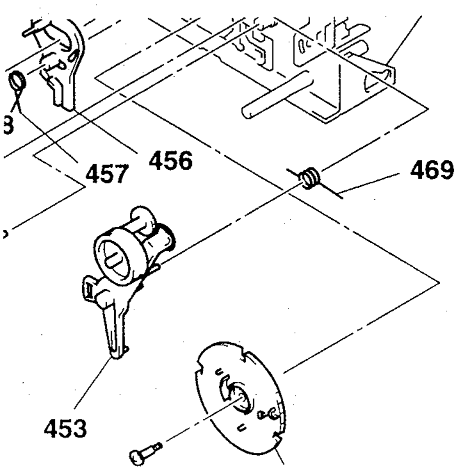
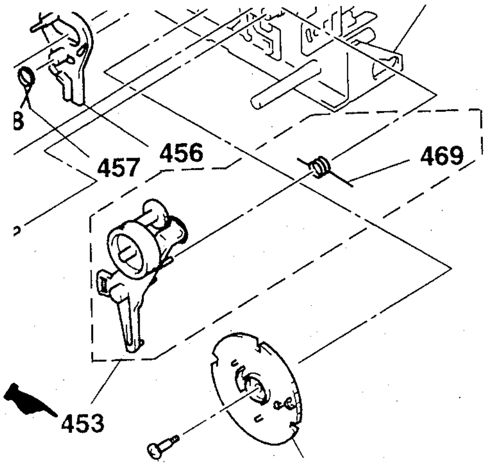
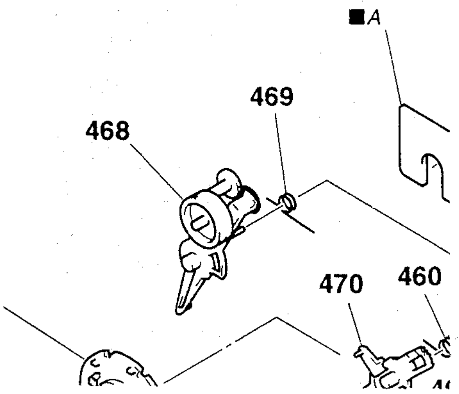
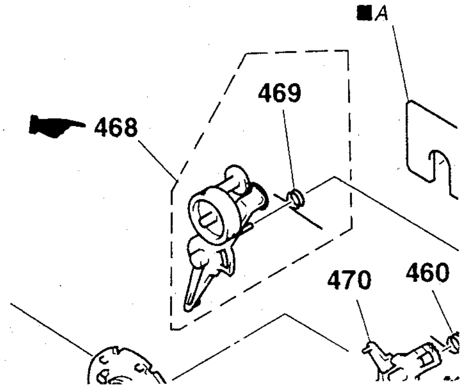
* NOTE
The parts No. 266 is supplied for Indonesia product only, but can be used as a substitute for the other countries product.

NOTE : The parts for part A were added as shown in the above temporaily, but they are not needed any more because "4-933-134-01 SCREW (+PTPWH M2.6 x 6)" of No. 261 has changed to "4-985-672-01 SCREW (+PTPWH M2.6 x 6), FLOATING".

Page	FORMER				NEW			
95	351	X-4946-789-1	HOLDER (L) ASSY, CASSETTE	(Indonesia product)	351	A-4384-221-A	HOLDER (L) ASSY, CASSETTE	(Indonesia product)
	352	X-4946-790-1	HOLDER (R) ASSY, CASSETTE	(Indonesia product)	352	A-4384-222-A	HOLDER (R) ASSY, CASSETTE	(Indonesia product)


358
351
355
#11
355
356
#11

☛ : indicates changed portion

Page	FORMER Ref No.	Part No.	Description	Remark	NEW Ref No.	Part No.	Description	Remark
96	* 403	X-3367-584-2	SLIDER (HEAD) ASSY		* 403	X-3370-844-1	SLIDER (HEAD) ASSY	
	412	X-3370-643-1	PINCH LEVER (REV) ASSY		412	X-3369-909-1	PINCH LEVER (REV) ASSY	
	413	X-3367-588-1	PINCH LEVER (FWD) ASSY		413	X-3369-908-1	PINCH LEVER (FWD) ASSY	
	419	3-911-116-21	RIVET, PUSH		419	3-939-862-01	CLIP	
	423	3-911-116-11	RIVET, PUSH					
					424	3-938-863-01	STOPPER	
								
97	453	X-3367-590-2	ARM (A) ASSY, FR		453	X-3372-930-1	ARM (A) ASSY, FR	
	468	X-3369-849-2	ARM (B) ASSY, FR		468	X-3372-931-1	ARM (B) ASSY, FR	
								
								

#6
420
☛ 419
(including ■A)
☛ 424
#6
422
415
414
457
456
469
453
■A
469
468
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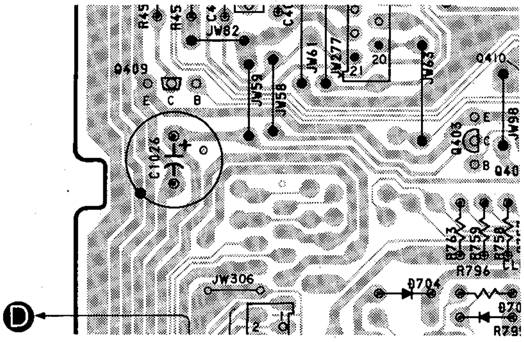
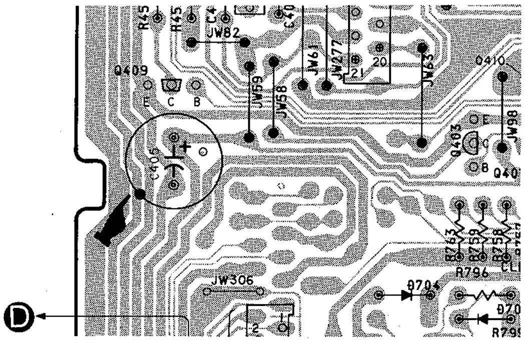
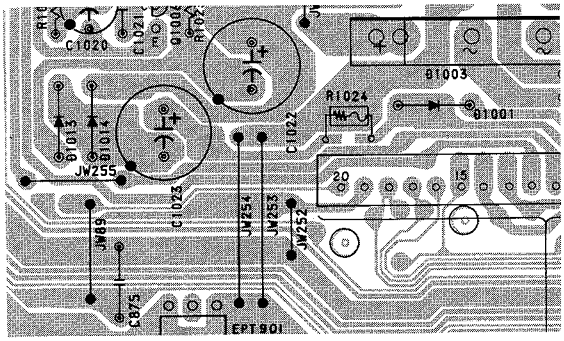
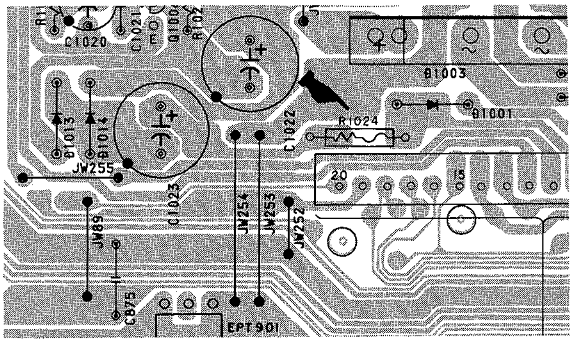
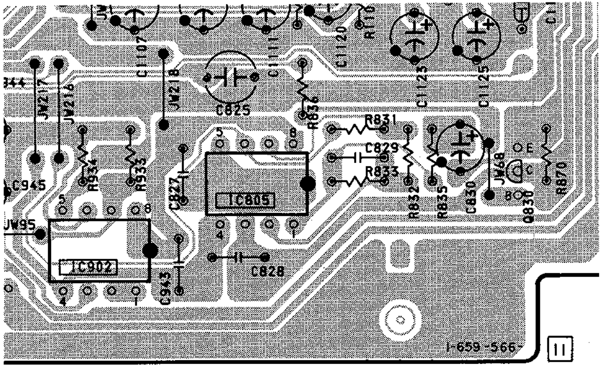
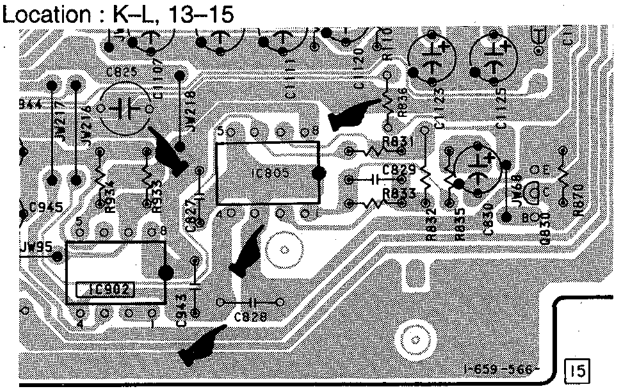
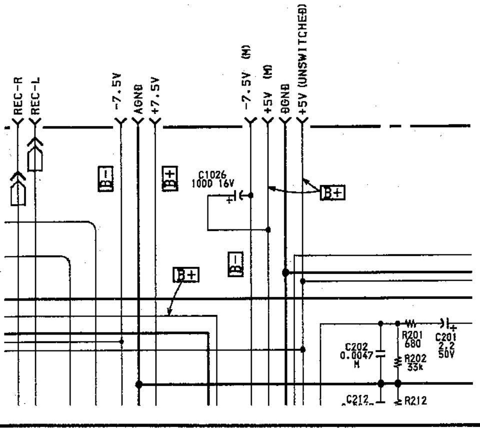
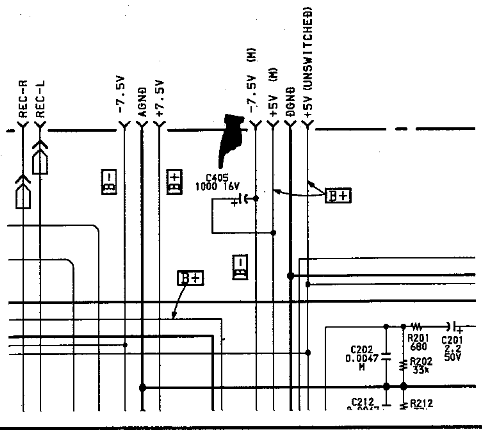
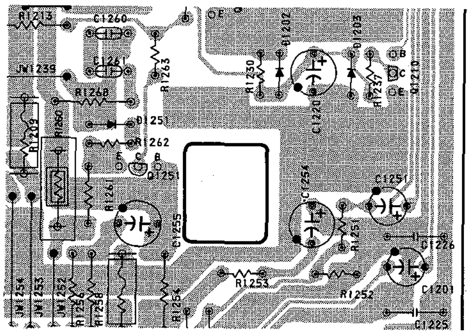
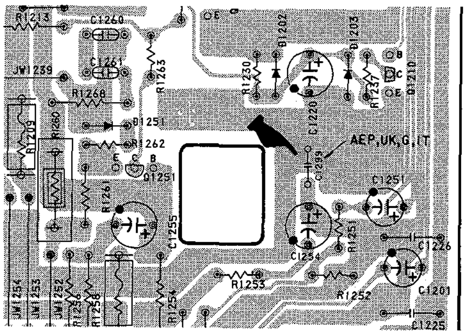
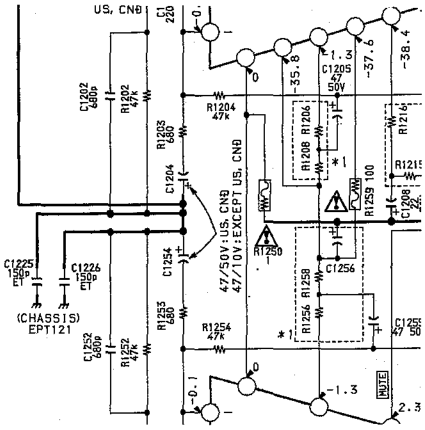
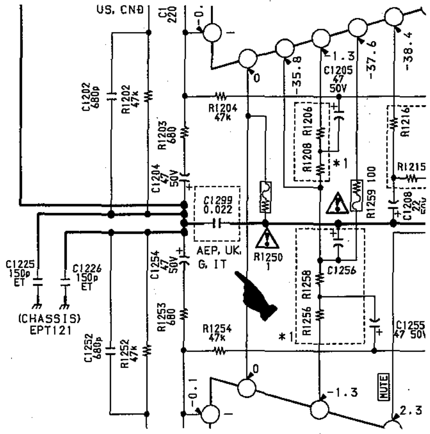
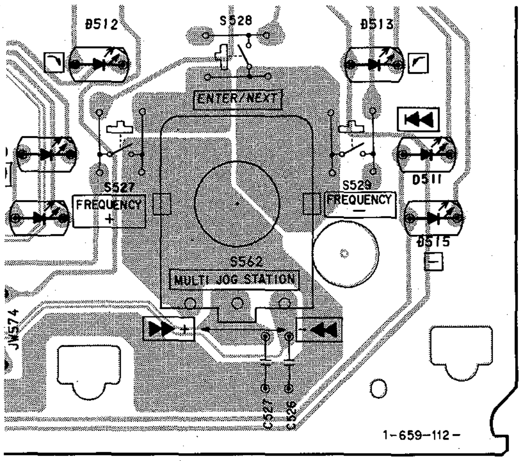
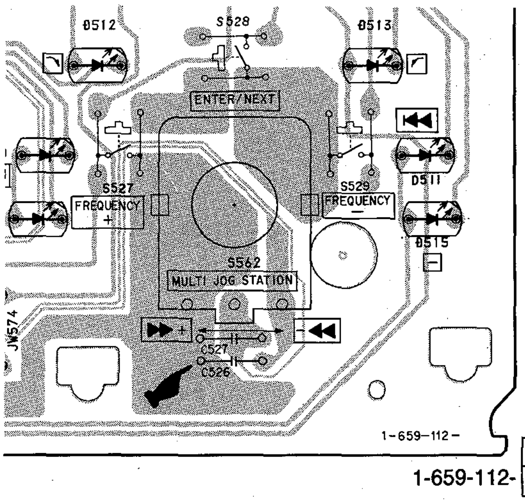
460
457
456
469
☛ 453
■A
469
☛ 468
470
460

- Parts and board changed (Printed wiring board, schematic diagram, electrical parts list)

☛ : indicates changed portion

Page	FORMER	NEW
47	**[MAIN BOARD]** Location : C–D, 1–3  1-659-566-11	**[MAIN BOARD]** Location : C–D, 1–3  1-659-566-15
	[MAIN BOARD] Location : J–K, 5–6  1-659-566-11	**[MAIN BOARD]** Location : J–K, 5–6  1-659-566-15
50	**[MAIN BOARD]** Location : K–L, 13–15  C825 IC805 IC902 C828 1-659-566- 11	**[MAIN BOARD]** Location : K–L, 13–15  C825 R836 IC805 IC902 C828 1-659-566- 15
51	**[MAIN BOARD]** Location : A–C, 21–23  REC-R REC-L -7.5V AGND +7.5V -7.5V (M) +5V (M) DGND +5V (UNSWITCHED) B– B+ C1026 1000 16V C202 0.0047 M R201 680 R202 33k C201 2.2 50V C212 R212	**[MAIN BOARD]** Location : A–C, 21–23  REC-R REC-L -7.5V AGND +7.5V -7.5V (M) +5V (M) DGND +5V (UNSWITCHED) B– B+ C405 1000 16V C202 0.0047 M R201 680 R202 33k C201 2.2 50V C212 R212

☛ : indicates changed portion

Page	FORMER	NEW
68	**[POWER AMP BOARD]** Location : F–G, 15–16  1-659-622- 11 (11)	**[POWER AMP BOARD]** Location : F–G, 15–16  C1299 AEP,UK,G,IT 1-659-622- 11 (14)
70	**[POWER AMP BOARD]** Location : E–G, 13–15 	**[POWER AMP BOARD]** Location : E–G, 13–15  C1299 0.022 AEP, UK, G, IT
79	**[JOG BOARD]** Location : C–E, 19–21  1-659-112- 11 (21)	**[JOG BOARD]** Location : C–E, 19–21  1-659-112- 11 (15)

- Abbreviation
  - G : German model
  - IT : Italian model

• ELECTRICAL PARTS LIST

Page	FORMER				NEW			
	Ref No.	Part No.	Description	Remark	Ref No.	Part No.	Description	Remark
100			*** HP/MIC BOARD ***				*** HP/MIC BOARD ***	
	C687	1-124-465-00	ELECT 0.47uF 20% 50V		C687	1-124-464-11	ELECT 0.22uF 20% 50V	
101			*** LEAF SWITCH BOARD ***				*** LEAF SWITCH BOARD ***	
	R1001	1-247-818-11	CARBON 300 5% 1/4W	(Malaysia product)	R1001	1-247-818-11	CARBON 300 5% 1/4W	
	R1001	1-249-412-11	CARBON 390 5% 1/4W	F (Except Malaysia product)			—	
	R1002	1-247-820-11	CARBON 360 5% 1/4W	(Malaysia product)	R1002	1-247-820-11	CARBON 360 5% 1/4W	
	R1002	1-249-412-11	CARBON 390 5% 1/4W	F (Except Malaysia product)			—	
102			*** MAIN BOARD ***				*** MAIN BOARD ***	
	C306	1-124-902-00	ELECT 0.47uF 20% 50V				—	
	C356	1-124-902-00	ELECT 0.47uF 20% 50V				—	
			—		C405	1-126-952-11	ELECT 1000uF 20% 16V	
	C912	1-136-167-00	FILM 0.15uF 5% 50V		C912	1-136-167-00	FILM 0.15uF 5% 50V (Except AUS)	
			—		C912	1-136-169-00	FILM 0.22uF 5% 50V (AUS)	
	C913	1-136-167-00	FILM 0.15uF 5% 50V		C913	1-136-167-00	FILM 0.15uF 5% 50V (Except AUS)	
			—		C913	1-136-169-00	FILM 0.22uF 5% 50V (AUS)	
103	C962	1-136-167-00	FILM 0.15uF 5% 50V		C962	1-136-167-00	FILM 0.15uF 5% 50V (Except AUS)	
			—		C962	1-136-169-00	FILM 0.22uF 5% 50V (AUS)	
	C963	1-136-167-00	FILM 0.15uF 5% 50V		C963	1-136-167-00	FILM 0.15uF 5% 50V (Except AUS)	
			—		C963	1-136-169-00	FILM 0.22uF 5% 50V (AUS)	
	C1026	1-126-952-11	ELECT 1000uF 20% 16V				—	
104	EPT901	1-537-770-21	TERMINAL BOARD, GROUND		* EPT901	1-537-738-21	TERMINAL, EARTH	
105	R304	1-249-428-11	CARBON 8.2K 5% 1/4W	F	R304	1-249-432-11	CARBON 18K 5% 1/4W	
	R305	1-249-425-11	CARBON 4.7K 5% 1/4W	F	R305	1-249-417-11	CARBON 1K 5% 1/4W	F
	R354	1-249-428-11	CARBON 8.2K 5% 1/4W	F	R354	1-249-432-11	CARBON 18K 5% 1/4W	
	R355	1-249-425-11	CARBON 4.7K 5% 1/4W	F	R355	1-249-417-11	CARBON 1K 5% 1/4W	F
106	R454	1-249-425-11	CARBON 4.7K 5% 1/4W	F (EA, MY)	R454	1-249-425-11	CARBON 4.7K 5% 1/4W	F (EA, MY, TH)
	R454	1-247-863-91	CARBON 22K 5% 1/4W	(Except EA, MY)	R454	1-247-863-91	CARBON 22K 5% 1/4W	(Except EA, MY, TH)
	R740	1-249-425-11	CARBON 4.7K 5% 1/4W	F (E2, AR, TH)	R740	1-249-425-11	CARBON 4.7K 5% 1/4W	F (E2, AR)
	R740	1-247-863-91	CARBON 22K 5% 1/4W (AUS)		R740	1-247-863-91	CARBON 22K 5% 1/4W (AUS, TH)	
	R741	1-249-427-11	CARBON 6.8K 5% 1/4W	F (E2, AR, TH)	R741	1-249-427-11	CARBON 6.8K 5% 1/4W	F (E2, AR)
	R741	1-247-863-91	CARBON 22K 5% 1/4W (AUS)		R741	1-247-863-91	CARBON 22K 5% 1/4W (AUS, TH)	
	R754	1-249-417-11	CARBON 1K 5% 1/4W	F	R754	1-247-807-31	CARBON 100 5% 1/4W	

- Abbreviation

EA	: Saudi Arabia model
MY	: Malaysia model
AUS	: Australian model
AR	: Argentine model
TH	: Thailand model
E2	: Without SW tuner model

Page	FORMER				NEW			
	Ref No.	Part No.	Description	Remark	Ref No.	Part No.	Description	Remark
107	R832	1-249-441-11	CARBON 100K 5% 1/4W	F	R832	1-247-843-11	CARBON 3.3K 5% 1/4W	
	R907	1-249-441-11	CARBON 100K 5% 1/4W	F	R907	1-249-441-11	CARBON 100K 5% 1/4W	F (Except AUS)
					R907	1-249-437-11	CARBON 47K 5% 1/4W (AUS)	
	R909	1-249-417-11	CARBON 1K 5% 1/4W	F	R909	1-249-417-11	CARBON 1K 5% 1/4W	F (Except AUS)
					R909	1-249-411-11	CARBON 330 5% 1/4W (AUS)	
	R957	1-249-441-11	CARBON 100K 5% 1/4W	F	R957	1-249-441-11	CARBON 100K 5% 1/4W	F (Except AUS)
					R957	1-249-437-11	CARBON 47K 5% 1/4W (AUS)	
	R959	1-249-417-11	CARBON 1K 5% 1/4W	F	R959	1-249-417-11	CARBON 1K 5% 1/4W	F (Except AUS)
					R959	1-249-411-11	CARBON 330 5% 1/4W (AUS)	
	R1022	1-249-421-11	CARBON 2.2K 5% 1/4W	F	R1022	1-249-425-11	CARBON 4.7K 5% 1/4W	F
	R1131	1-249-432-11	CARBON 18K 5% 1/4W	F	R1131	1-249-428-11	CARBON 8.2K 5% 1/4W	F
111			*** PANEL BOARD ***				*** PANEL BOARD ***	
	R587	1-249-407-11	CARBON 150 5% 1/4W	F	R587	1-249-407-11	CARBON 150 5% 1/4W	(Except EA, MY, TH)
					R587	1-247-815-91	CARBON 220 5% 1/4W (TH)	
					R587	1-247-409-11	CARBON 220 5% 1/4W	F (EA, MY)
	R631	1-247-899-11	CARBON 680K 5% 1/4W		R631	1-247-899-11	CARBON 680K 5% 1/4W	(Except EA, MY)
					R631	1-247-897-11	CARBON 560K 5% 1/4W (EA, MY)	
	R632	1-247-899-11	CARBON 680K 5% 1/4W		R632	1-247-899-11	CARBON 680K 5% 1/4W	(Except EA, MY)
					R632	1-247-897-11	CARBON 560K 5% 1/4W (EA, MY)	
	R633	1-247-899-11	CARBON 680K 5% 1/4W		R633	1-247-899-11	CARBON 680K 5% 1/4W	(Except EA, MY)
					R633	1-247-897-11	CARBON 560K 5% 1/4W (EA, MY)	
	R634	1-247-899-11	CARBON 680K 5% 1/4W		R634	1-247-899-11	CARBON 680K 5% 1/4W	(Except EA, MY)
					R634	1-247-897-11	CARBON 560K 5% 1/4W (EA, MY)	
112			*** POWER AMP BOARD ***				*** POWER AMP BOARD ***	
	C1204	1-126-967-11	ELECT 47uF 20% 50V (US, CND)		C1204	1-126-967-11	ELECT 47uF 20% 50V	
	C1204	1-104-664-11	ELECT 47uF 20% 10V (Except US, CND)					
113	C1254	1-126-967-11	ELECT 47uF 20% 50V (US, CND)		C1254	1-126-967-11	ELECT 47uF 20% 50V	
	C1254	1-104-664-11	ELECT 47uF 20% 10V (Except US, CND)					
	C1290	1-126-138-11	ELECT 4700uF 20% 50V (AEP, UK, G, IT)		C1290	1-126-138-11	ELECT 4700uF 20% 50V (Except US, CND)	
	C1290	1-104-482-11	ELECT 4700uF 20% 63V (Except US, CND, AEP, UK, G, IT)					
					C1299	1-161-494-00	CERAMIC 0.022uF 25V (AEP, UK, G, IT)	
	EPT121	1-537-770-21	TERMINAL BOARD, GROUND		* EPT121	1-537-738-21	TERMINAL, EARTH	

Page	FORMER				NEW			
	Ref No.	Part No.	Description	Remark	Ref No.	Part No.	Description	Remark
113	IC1201	8-749-900-34	IC STK-4182MK2 (AEP, UK, G, IT)		IC1201	8-749-900-34	IC STK-4182MK2 (Except US, CND)	
	IC1201	8-749-900-78	IC STK-4192MK2 (Except US, CND, AEP, UK, G, IT)				———	
115			*** SENSOR (FAN) BOARD ***				*** SENSOR (FAN) BOARD ***	
	* CN1295	1-564-337-00	PIN, CONNECTOR 3P		* CN1295	1-568-941-11	PIN, CONNECTOR 3P	
116			*** SURROUND AMPLIFIER BOARD ***				*** SURROUND AMPLIFIER BOARD ***	
	EPT131	1-537-770-21	TERMINAL BOARD, GROUND		* EPT131	1-537-738-21	TERMINAL, EARTH	
	EPT132	1-537-770-21	TERMINAL BOARD, GROUND (AEP, UK, G, IT)		* EPT132	1-537-738-21	TERMINAL, EARTH (AEP, UK, G, IT)	
			*** TC-SW BOARD ***				*** TC-SW BOARD ***	
	D523	8-719-032-87	DIODE SEL5420S-TP (◁ DECK B)		D523	8-719-032-86	DIODE SEL5420E (◁ DECK B)	
	D524	8-719-032-87	DIODE SEL5420S-TP (▷ DECK B)		D524	8-719-032-86	DIODE SEL5420E (▷ DECK B)	
123			*** TRANSFORMER BOARD ***				*** TRANSFORMER BOARD ***	
	D1602	8-719-028-23	DIODE D3SBA20-4101 (Except TH)		D1602	8-719-028-23	DIODE D3SBA20-4101	
	D1602	8-719-025-03	DIODE RBA-402-SL (TH)				———	
	⚠F1605	1-532-465-31	FUSE, TIME-LAG (3.15A 250V) (Except US, CND)		⚠F1605	1-532-465-31	FUSE, TIME-LAG (3.15A 250V) (AEP, UK, G, IT)	
			———		⚠F1605	1-532-464-31	FUSE, TIME-LAG (2.5A 250V) (Except US, CND, AEP, UK, G, IT)	
	⚠F1606	1-532-465-31	FUSE, TIME-LAG (3.15A 250V) (Except US, CND)		⚠F1606	1-532-465-31	FUSE, TIME-LAG (3.15A 250V) (AEP, UK, G, IT)	
			———		⚠F1606	1-532-464-31	FUSE, TIME-LAG (2.5A 250V) (Except US, CND, AEP, UK, G, IT)	
	⚠T1601	1-429-531-11	TRANSFORMER, POWER (E, AUS, SP, HK, IA, PX)		⚠T1601	1-429-531-11	TRANSFORMER, POWER (E, AUS, SP, HK, AR, IA, PX)	
	⚠T1601	1-429-298-11	TRANSFORMER, POWER (AR)				———	
124			*** MISCELLANEOUS ***				*** MISCELLANEOUS ***	
	9	1-776-442-11	WIRE (FLAT TYPE) (19 CORE)		9	1-776-442-11	WIRE (FLAT TYPE) (19 CORE) (Except US, AEP, E, PX, TH)	
			———		9	1-776-241-11	WIRE (FLAT TYPE) (19 CORE) (US, AEP, E, PX, TH)	
	⚠F1605	1-532-465-31	FUSE, TIME-LAG (3.15A 250V) (Except US, CND)		⚠F1605	1-532-465-31	FUSE, TIME-LAG (3.15A 250V) (AEP, UK, G, IT)	
			———		⚠F1605	1-532-464-31	FUSE, TIME-LAG (2.5A 250V) (Except US, CND, AEP, UK, G, IT)	
	⚠F1606	1-532-465-31	FUSE, TIME-LAG (3.15A 250V) (Except US, CND)		⚠F1606	1-532-465-31	FUSE, TIME-LAG (3.15A 250V) (AEP, UK, G, IT)	
			———		⚠F1606	1-532-464-31	FUSE, TIME-LAG (2.5A 250V) (Except US, CND, AEP, UK, G, IT)	
			*** HARDWARE LIST ***				*** HARDWARE LIST ***	
	# 11	7-621-770-67	SCREW +BVTT 2.6X6 (S)		# 11	7-685-862-09	SCREW +BVTT 2.6X6	

- Abbreviation

CND : Canadian model
G : German model
IT : Italian model
EA : Saudi Arabia model
MY : Malaysia model
HK : Hong Kong model
SP : Singapore model
AUS : Australian model
AR : Argentine model
TH : Thailand model
IA : Indonesian model

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

TCB BOARD CHANGED (E3, EA, MY, SP, HK, IA, PX model)

- The TCB board of models E3, EA, MY, SP, HK, IA and PX has changed to the tuner pack halfway. As for details, refer to the following.

ELECTRICAL ADJUSTMENT

No Adjustment is needed due to a tuner pack.

ELECTRICAL PARTS LIST

Difference table

Page	FORMER				NEW			
	Ref No.	Part No.	Description	Remark	Ref No.	Part No.	Description	Remark
121	*	A-4303-506-A	TCB BOARD, COMPLETE (E3, HK, SP, IA, PX)		*	1-233-546-11	ENCAPSLATED COMPONENT, FM/AM TUNER * NOTE (E3, PX, EA, MY, SP, HK, IA)	
	*	A-4303-518-A	TCB BOARD, COMPLETE (EA, MY)					

- Abbreviation
  EA : Saudi Arabia model
  MY : Malaysia model
  HK : Hong Kong model
  SP : Singapore model
  IA : Indonesian model
  E3 : With SW tuner model

* NOTE
The TCB BOARD, COMPLETE was changed to FM/AM TUNER PACK in the middle of producing.

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Sony Corporation
Home A&V Products Company

MHC-991AV/G99AV

SERVICE MANUAL

US Model
Canadian Model
AEP Model
UK Model
MHC-991AV

E Model
Australian Model
PX Model
MHC-G99AV

- MHC-991AV/G99AV are composed of following models.
  As for the service manual, it is issued for each component model, then, please refer to it.

COMPONENTS MODEL NAME FOR MHC-991AV/G99AV

	MHC-991AV/G99AV
COMPACT DISC DECK RECEIVER SYSTEM	HCD-H991AV
FRONT SPEAKER SYSTEM	SS-H991
CENTER SPEAKER SYSTEM	SS-CN991
REAR SPEAKER SYSTEM	SS-SR991

SPECIFICATIONS

General

Power requirements
US, Canadian models : 120V AC, 60Hz
AEP, UK, German, Italian models :
220 – 230V AC, 50/60Hz
Malaysia model : 220 – 240V AC, 50/60Hz
Australian model : 240V AC, 50/60Hz
Thailand model : 220V AC, 50/60Hz
OTHER models :
110 – 120V or 220 – 240V AC, 50/60Hz
Adjustable with the voltage selector

Power consumption
US model : 275W
Canadian model : 300VA
AEP, UK, German, Italian models : 170W
Other models : 190W

Supplied accessories

AM loop antenna (1)
Remote RM-SE1AV (1)
Sony SUM-3 (NS) batteries (2)
FM lead antenna (1)
Speaker cords (5)
Foot (4)

Design and specifications are subject to change without notice.

COMPACT Hi-Fi STEREO SYSTEM

SONY®

PARTS LIST

NOTE :
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- Abbreviations

CND : Canadian model
G : German model
IT : Italian model
EA : Saudi Arabia model
HK : Hong Kong model
SP : Singapore model
MY : Malaysia model
AUS : Australian model
AR : Argentine model
TH : Thailand model
IA : Indonesian model

	Part No.	Description	Remark
		ACCESSORIES & PACKING MATERIALS	
		**************************************	
	1-473-608-11	COMMANDER, STANDARD (RM-SE1AV)	
	1-501-374-11	ANTENNA, LOOP	
	1-501-594-11	ANTENNA (FM) (MALAYSIA PRODUCT) (AEP)	
	1-501-659-11	ANTENNA (FM) (EA, MY, TH)	
	1-501-659-41	ANTENNA (FM) (US, CND, E, AUS, PX, SP, HK, AR, IA)	
	1-501-804-11	ANTENNA (FM) (INDONESIA PRODUCT) (AEP, UK, G, IT)	
	1-769-317-11	CORD, SPEAKER (FRONT SPEAKER 2.5m)	
	1-769-433-11	CORD, SPEAKER (SURROUND 10m)	
	3-810-949-11	MANUAL, INSTRUCTION (ENGLISH) (US, CND)	
	3-810-949-21	MANUAL, INSTRUCTION (FRENCH) (CND)	
	3-810-949-31	MANUAL, INSTRUCTION (ENGLISH) (UK)	
	3-810-949-41	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, PORTUGUESE) (PRINTED IN INDONESIA) (AEP)	
	3-810-949-51	MANUAL, INSTRUCTION (GERMAN) (G)	
	3-810-949-61	MANUAL, INSTRUCTION (GERMAN, DUTCH, ITALIAN) (PRINTED IN INDONESIA) (AEP, IT)	
	3-810-949-71	MANUAL, INSTRUCTION (DANISH, FINNISH, CHINESE) (PRINTED IN INDONESIA) (AEP)	
	3-810-949-81	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, CHINESE) (E, AUS, PX, SP, HK, AR, IA)	
	3-810-949-91	MANUAL, INSTRUCTION (ARABIC) (E, PX)	
	3-810-950-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, PORTUGUESE) (PRINTED IN MALAYSIA) (AEP)	
	3-810-950-21	MANUAL, INSTRUCTION (GERMAN, DUTCH, ITALIAN) (PRINTED IN MALAYSIA) (AEP)	
	3-810-950-31	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, CHINESE) (EA, MY)	
	3-856-776-11	MANUAL, INSTRUCTION (ENGLISH, THAI) (TH)	
	4-972-322-01	FOOT (Y) (SURROUND)	
*	4-980-428-01	CUSHION (FRONT) (HCD) (MALAYSIA PRODUCT)	
*	4-980-429-01	CUSHION (REAR) (HCD) (MALAYSIA PRODUCT)	
*	4-981-327-01	CUSHION (for SS-H991)	
	4-981-643-01	COVER, BATTERY (for RM-SE1AV)	
*	4-982-299-01	CUSHION (UPPER) (SURROUND)	
*	4-982-300-01	CUSHION (LOWER) (SURROUND)	
*	4-982-354-01	INDIVIDUAL CARTON (E, PX, SP, HK, AR, IA)	
*	4-982-355-01	INDIVIDUAL CARTON (AUS)	
*	4-982-360-01	INDIVIDUAL CARTON (US, CND)	
*	4-982-361-01	INDIVIDUAL CARTON (INDONESIA PRODUCT) (AEP, UK, G, IT)	
*	4-982-547-01	CUSHION (FRONT) (HCD) (EXCEPT MALAYSIA PRODUCT)	
*	4-982-548-01	CUSHION (REAR) (HCD) (EXCEPT MALAYSIA PRODUCT)	
*	4-983-480-01	INDIVIDUAL CARTON (MALAYSIA PRODUCT) (AEP)	
*	4-983-481-01	INDIVIDUAL CARTON (EA)	
*	4-983-482-01	INDIVIDUAL CARTON (MY)	
*	4-984-121-01	INDIVIDUAL CARTON (TH)	

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